Digitized by the Internet Archive
in 2016 with funding from
The National Endowment for the Humanities and the Arcadia Fund

https://archive.org/details/michiganmedicine702unse

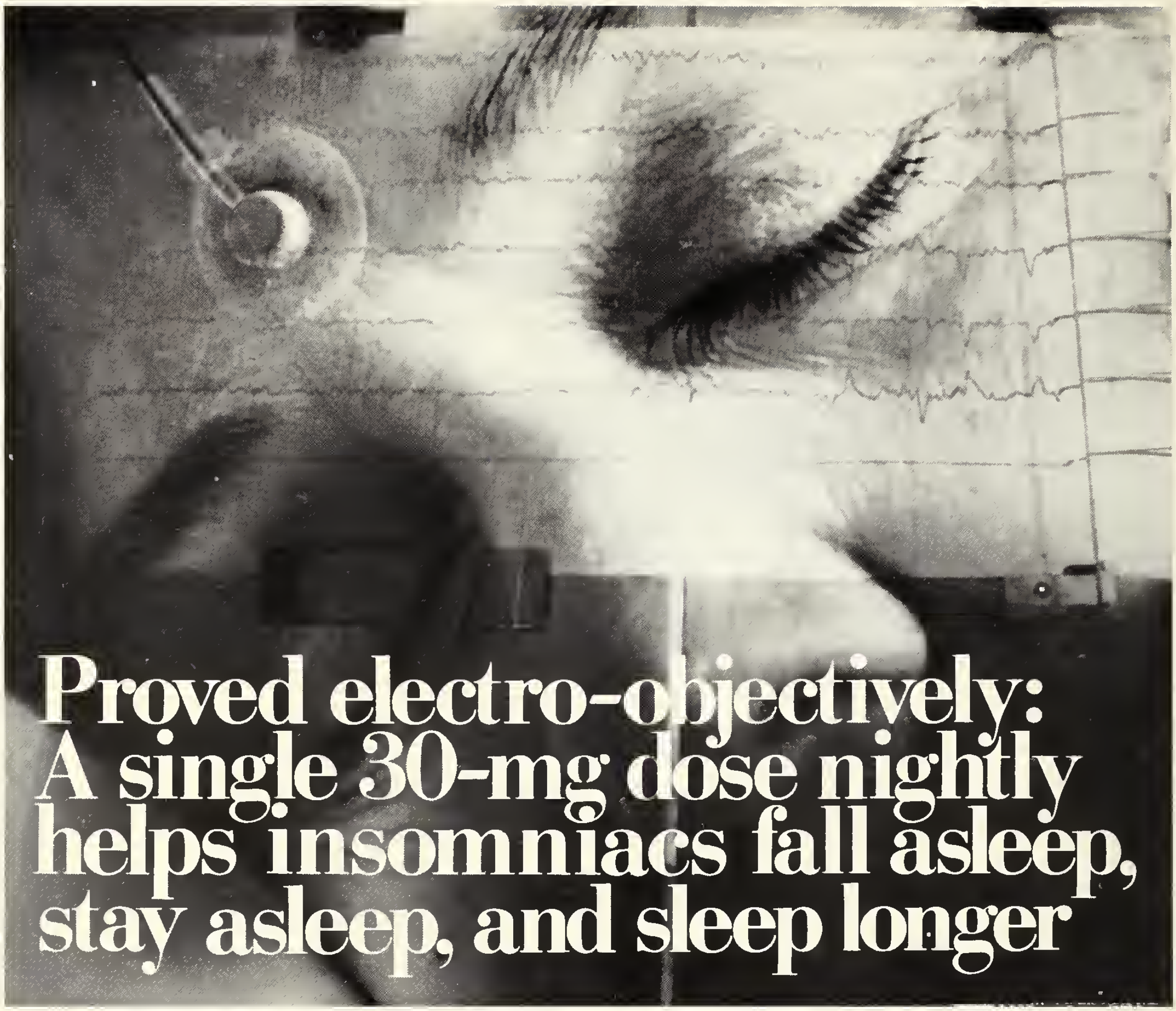
RECOMMENDED READING:

The mentally retarded and the family physician
Explanation of how percentiles are developed
Many other articles about MSMS, ancillary groups

Michigan Medicine

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JUL 26 1971

269911



Proved electro-objectively: A single 30-mg dose nightly helps insomniacs fall asleep, stay asleep, and sleep longer

Controlled studies of 23 insomniac and 13 normal subjects treated with Dalmane (flurazepam HCl) in five sleep laboratories generated over 4000 hours of electroencephalographic, electro-oculographic and electromyographic tracings. These studies revealed that Dalmane 30 mg nightly usually induces sleep in 22 minutes and provides seven to eight hours of sleep.[1,2,3]

Moreover, Dalmane 30 mg was found to be useful in all common types of insomnia in which it was studied. Of drugs studied in a sleep laboratory,[1] Dalmane 30 mg was the only one that consistently reduced sleep induction time and maintained sleep nightly for 14 consecutive nights of use.

Confirmed clinically

Fifty-three controlled studies using a paired-night, double-blind crossover design have evaluated Dalmane clinically. In the majority of these, Dalmane (flurazepam HCl) significantly reduced sleep induction time and increased sleep duration. Dalmane and a placebo were alternated on successive nights in 2010 insomniacs, 1706 of whom were studied for a single night-pair, and the remainder for as many as fifteen paired-nights. A patient preference for Dalmane was apparent in the paired-night studies.

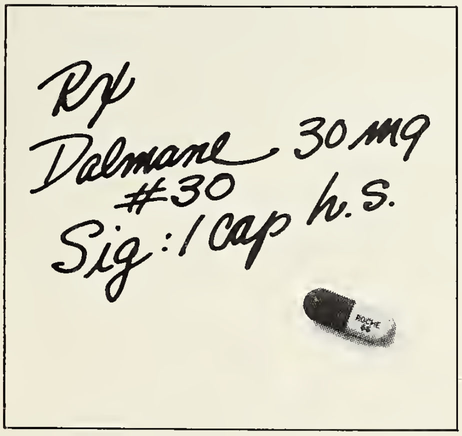
Dalmane was also preferred to certain hypnotics in two separate preference studies. In each of two double-blind studies, Dalmane 30 mg retained effectiveness for the total period of seven consecutive treatment nights, according to subjective/objective evaluations.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.:* "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.:* "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed.): *Sleep: Physiology and Pathology,* Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



For the sleep your patients need

New **Dalmane**®

(flurazepam hydrochloride)

Before prescribing, please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.,* operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.,* excitement, stimulation and hyperactivity, have also been reported in rare instances.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

You know
diuretics
medically.

Short-acting diuretics may create abrupt,
inconvenient waves of diuresis.
Long-acting Hygroton offers a gentle flow
rather than abrupt diuresis.
It's smooth acting.
In edema and hypertension.

Hygroton® chlorthalidone USP

Makes water, not waves.

But
have you
met them
socially?
LADIES

Electrolyte imbalance may occur when using diuretics. Hygroton is contraindicated in severe renal or hepatic diseases and, of course, if it causes hypersensitivity. Carefully supervise those who may be receiving other antihypertensives.

Hygroton® chlorthalidone USP *Indications:* Hypertension and many types of edema involving retention of salt and water. *Contraindications:* Hypersensitivity and most cases of severe renal or hepatic diseases. *Warnings:* With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Use with caution in pregnant women and nursing mothers since the drug crosses the placental barrier and appears in cord blood and since thiazides appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus. *Precautions:* Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. *Adverse Reactions:* Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization. *Average Dosage:* 50 or 100 mg. with breakfast daily or 100 mg. every other day. *How Supplied:* White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000. (B)46-230-G *For full details, please see the complete prescribing information.*

GEIGY Pharmaceuticals, Division of CIBA-GEIGY Corporation, Ardsley, New York 10502

HY-7764-9

Michigan Medicine

IN THIS ISSUE

SCIENTIFIC ARTICLES

597 The mentally retarded and the family physician: Results of a survey of Michigan doctors; Siegried A. Centerwall, MD
603 The hazards of drug addiction on a trauma ward; Ronald L. Krome, MD; Anna Ledgerwood, MD; Charles E. Lucas, MD
607 Aortosaphenous coronary artery bypass surgery for obstructive coronary artery disease; John Brady, MD; Ali Esfahani, MD; Walter Janke, MD
609 Atypical endocervical hyperplasia and oral contraceptives: Report of a case; Hushang M. Payan, MD
611 Amniocentesis in early pregnancy: Prenatal detection of genetic disease; Roy Schmickel, MD; Arthur Bloom, MD; Bruce Work, MD; Robert Jaffe, MD
616 Head and neck metastases from renal carcinomas; Roger Boles, MD; Joseph Cerny, MD

SPECIAL ARTICLES

615 Re-registration figures from State Board describe MD distribution
628 RN's duties in determination of death described by Attorney General
646 Explains methods used to determine Medicare and Medicaid percentiles; John Anthony
662 Here's latest information about licensing of Michigan doctors of medicine; Herb Auer

OTHER FEATURES

594 MSMS Leadership
595 President's Page
606 Perinatal Tips
614 The Viewbox
619 Your Opinion Please
625 Michigan Mediscene
634 New Members
636 Drug Therapy Problems
639 Mailbox
643 Ancillary
658 About Doctors
664 Country Societies
671 Michigan Authors
674 In Memoriam
685 Breaking News

The original artwork on the cover is by Craig Dennis, University of Michigan art student who is planning a career in medical illustration.

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published Semi-Monthly, Trimonthly in January and December; 26 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351.

© 1971 Michigan State Medical Society.

SCIENTIFIC EDITOR
John W. Moses, MD

EXECUTIVE EDITOR
Herbert A. Auer

MANAGING EDITOR
Judith Marr

PUBLICATION COMMITTEE
Robert M. Leitch, MD
Battle Creek
Chairman

Donato F. Sarapo, MD
Adrian

Edward J. Tallant, MD
Detroit

INFORMATION FOR CONTRIBUTORS

1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size (8½ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.

2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.

3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by Michigan Medicine.

4. Articles should ordinarily be less than four printed pages in length (3000 words).

5. References should conform to *Cumulative Index Medicus,* including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.

6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. New items and notes are welcome.

7. It is understood that material is submitted for exclusive publication in Michigan Medicine.

when manhood ebbs... or is delayed due to testicular hormonal insufficiency

What nature denies, Halotestin may replace. That's the purpose of this orally active androgen in conditions such as impotency, eunuchoidism, and eunuchism. The most widely used agent of its kind, Halotestin is replacement therapy with approximately five times the potency of oral methyltestosterone. And, at its recommended daily dosage of 2 to 10 mg., Halotestin is economical as well as convenient. Of course, you will want to employ androgens carefully in young boys to avoid premature epiphyseal closure...and in the elderly where possible sodium retention may, minimally, precipitate edema. Tablets of 2, 5, and 10 mg.

Halotestin® 5 mg. tablets

(fluoxymesterone Upjohn)

oral replacement with parenteral-like potency

Please see facing column for summary of contraindications, precautions, and adverse reactions.

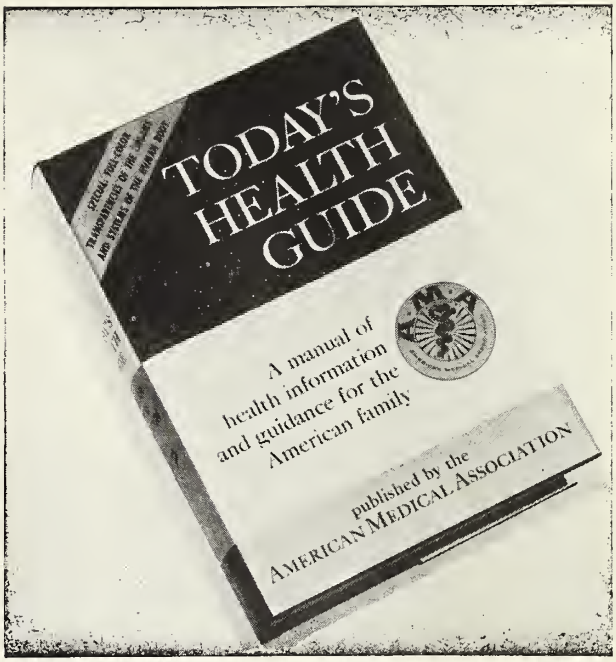
Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Halotestin®
(fluoxymesterone, Upjohn)

Orally active androgen about 5 times as potent in anabolic and androgenic activity as methyltestosterone. Halotestin (fluoxymesterone) induces significant retention of calcium and potassium, but retention of sodium not marked. Doses below 20 mg. daily have little effect in producing creatinuria.
Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, agnogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.
Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.
Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.
Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.
Supplied *Tablets: 2 mg.*, scored—bottles of 100./*5 mg.*, scored—bottles of 50./*10 mg.*, scored—bottles of 50.
For additional product information, see your Upjohn representative or consult the package circular.

Upjohn The Upjohn Company, Kalamazoo, Michigan

JA68-7627-R MED 8-5-S (LQX)


SPECIAL FULL-COLOR TRANSPARENCIES OF THE ORGANS AND SYSTEMS OF THE HUMAN BODY
TODAY'S HEALTH GUIDE
A manual of health information and guidance for the American family
A.M.A.
published by the AMERICAN MEDICAL ASSOCIATION

FOR YOUR PATIENTS:

Today's Health Guide is an up-to-date, 646-page, family health reference that should be in every home. The AMA's long awaited new book, Today's Health Guide, is the product of 200 of the world's most renowned authorities in medicine, science and allied fields.

The Guide discusses more than 2,000 illnesses, diseases and other medical subjects including diet and nutrition, child care, safety and first aid, sex education, mental health and when to seek professional medical attention. Over 300 striking illustrations and an eight-page full-color transparency of the human body vividly complement the text.

Today's Health Guide is the medical profession's answer to the need for an inexpensive yet authoritative and comprehensive home health guide.

Your patients may obtain one by sending a check or money order for $5.00 for each copy to the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

MSMS Leadership

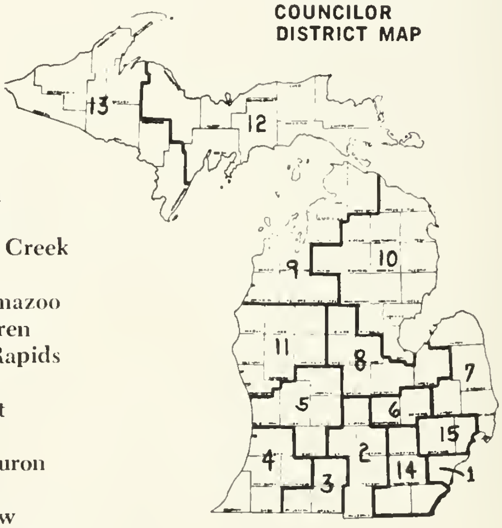
PRESIDENT: Harold H. Hiscock, MD, Flint
PRESIDENT-ELECT: Sidney Adler, MD, Detroit
SECRETARY: Kenneth H. Johnson, MD, Lansing
ASST. SECRETARY: Brooker L. Masters, MD, Fremont
TREASURER: John R. Ylvisaker, MD, Pontiac
ASST. TREASURER: C. Allen Payne, MD, Grand Rapids
SPEAKER: Vernon V. Bass, MD, Saginaw
VICE-SPEAKER: James D. Fryfogle, MD, Detroit
PAST PRESIDENT: Robert J. Mason, MD, Birmingham

COUNCIL CHAIRMAN: Ross V. Taylor, MD, Jackson
VICE-CHAIRMAN: Brooker L. Masters, MD, Fremont
DIRECTOR: Warren F. Tryloff, East Lansing
GENERAL COUNSEL: Lester P. Dodd, Detroit
LEGAL COUNSEL: A. Stewart Kerr, Detroit
SCIENTIFIC EDITOR: John W. Moses, MD, Detroit
ECON. CONSULTANT: Clyde T. Hardwick, Houghton
HISTORIAN: Wm. J. Stapleton, Jr., MD, Detroit
ASST. HISTORIAN: Wm. M. LeFevre, MD, Muskegon

AMA DELEGATES
Otto K. Engelke, MD, Ann Arbor
John R. Heidenreich, MD, Daggett
Luther R. Leader, MD, Royal Oak
Robert E. Rice, MD, Greenville
John J. Coury, MD, Port Huron
George W. Slagle, MD, Battle Creek
Donald N. Sweeny, Jr., MD, Detroit (Chairman)
Joseph A. Witter, MD, Rochester

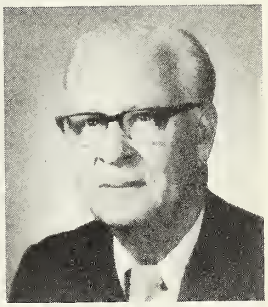
ALTERNATES
John W. Moses, MD, Detroit
Paul T. Lahti, MD, Royal Oak
Harold A. Furlong, MD, Pontiac
Bradley M. Harris, MD, Ypsilanti
James C. Danforth, Jr., MD, Detroit
Marjorie Peebles Meyers, MD, Detroit
Robert C. Prophater, MD, Bay City
Vernon V. Bass, MD, Saginaw

First District Councilors: (Wayne County)
Edward J. Tallant, MD, Detroit
Ralph R. Cooper, MD, Detroit
Frank G. Bicknell, MD, Detroit
Milton R. Weed, MD, Grosse Pointe Park
Brock E. Brush, MD, Detroit
Second District Councilor: Ross V. Taylor, MD, Jackson
Counties: Clinton, Eaton, Hillsdale, Ingham, Jackson
Third District Councilor: Robert M. Leitch, MD, Battle Creek
Counties: Branch, Calhoun, St. Joseph
Fourth District Councilor: W. Kaye Locklin, MD, Kalamazoo
Counties: Allegan, Berrien, Cass, Kalamazoo, Van Buren
Fifth District Councilor: Noyes L. Avery, MD, Grand Rapids
Counties: Barry, Ionia-Montcalm, Kent, Ottawa
Sixth District Councilor: Ernest P. Griffin, Jr., MD, Flint
Counties: Genesee, Shiawassee
Seventh District Councilor: John J. Coury, MD, Port Huron
Counties: Huron, Sanilac, Lapeer, St. Clair
Eighth District Councilor: A. Carl Stander, MD, Saginaw
Counties: Gratiot-Isabella-Clare, Midland, Saginaw, Tuscola
Ninth District Councilor: Adam C. McClay, MD, Traverse City
Counties: Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet combined), Wexford-Missaukee
Tenth District Councilor: Robert C. Prophater, MD, Bay City
Counties: Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties, (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined)
Eleventh District Councilor: Brooker L. Masters, MD, Fremont
Counties: Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana
Twelfth District Councilor: William A. LeMire, Sr., MD, Escanaba
Counties: Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger
Thirteenth District Councilor: Donald T. Anderson, MD, Wakefield
Counties: Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon
Fourteenth District Councilor: Donato F. Sarapo, MD, Adrian
Counties: Lenawee, Livingston, Monroe, Washtenaw
Fifteenth District Councilor: Sydney Scher, MD, Mount Clemens
Counties: Macomb, Oakland


COUNCILOR DISTRICT MAP

President's Page

CHANGES WILL OCCUR



H. H. Hiscock, M.D.
MSMS President

Our President, Dr. Hiscock, has invited me to write an editorial in his President's Page of *Michigan Medicine*. He kindly allowed me to choose my subject. At first thought, I felt that there would be no problem involved in picking and discussing a suitable subject.

On further reflection, the picking of a suitable subject assumed formidable proportions. The problems facing organized medicine are so large and varied.

A few of the pressing problems passed through my mind.

* * *

What shall be the future relationship between the State Medical Society and Blue Shield? Shall Shield pick the Doctors of Medicine who shall sit as members of its corporate body since the Special Session of the House of Delegates of the State Society refused to do so? There will be Doctors of Medicine on the corporate body; this is the directive of the Insurance Commissioner of the State of Michigan.

* * *

Should I discuss the Governor's Message to the State Legislature concerning the delivery of Health Care to the citizens of the State? Incidentally, every member of the State Medical Society should have a copy of this message. It places emphasis on Health Maintenance Organizations (H.M.O.) as the means by which the State will carry out its responsibilities under Medicaid. There are many aspects of this message which are quite specific and many which are quite vague. No one seems to know exactly what form a H.M.O. should take. There is no adequate definition of Health Care. Does it mean medical care or what the word really says, HEALTH Care. The latter includes proper food, proper clothing, proper housing and many others in addition to preventative and therapeutic medical care.

* * *

Should I discuss the actions of the Insurance Commissioner of the Commonwealth of Pennsylvania in ordering elimination of hospital representatives and physicians from the Board of Directors of Blue Cross of Philadelphia, the publication to the public of room and board costs by every hospital so that consumers could do "comparative shopping" on deciding which hospital they wish to patronize so they could purchase their "quality" health care on the sole basis of the Almighty Dollar ignoring the hospital affiliations of their physician?

Should I discuss his suggestion that doctors rather than hospitals pay the salaries of interns and residents, a major hospital cost now passed on to Blue Cross. The implication of this is, of course, that the intern and resident will then be an employee of the physician and not a post-graduate student furthering his education?

Should I discuss the fact that the Blue Cross of Philadelphia to all intents and purposes rolled over and played dead? Should I discuss the half-truths which, after constant repetition, are accepted by the public as fact?

* * *

Should I discuss the distortions of the statistics of the World Health Organization as used by certain senators and labor leaders. This, in spite of the fact that the authors of the report stated in the preface that, due to the wide variations in the collection of vital statistics by various countries, no statistically

(Continued on Page 620)

Now
available for your
prescribing
needs

Cordran® Tape
Flurandrenolide Tape (4 mcg. per sq. cm.)

Additional information available upon request • Eli Lilly and Company, Indianapolis, Indiana 46206
000121

Lilly

The mentally retarded and the family physician:

Results of a survey of Michigan doctors

By Siegried A. Centerwall, MD
San Bernardino, Calif.

The University of Michigan recently has been developing new educational programs for Michigan doctors about mental retardation. One of the primary concerns was to identify the doctors that had some interest in and need for information about the care of retarded children. One idea that was repeatedly expressed, but without concrete evidence, was that most general practitioners were not concerned with the care of the retarded, and therefore, physician education should be for the benefit of pediatricians. In addition, there was the question of the osteopathic physicians in Michigan who make up a group almost equal in size to the MD general practitioners.

In order to bring some facts to bear upon these questions, a comprehensive and representative survey of Michigan physicians was undertaken in April and May 1968.

Methods

Selection of Samples

Four groups of Michigan physicians were identified for sampling. The names of MDs, both in general practice and pediatrics, were taken from the 1967 American Medical Association Directory. The names of DOs were taken from a list provided by the Michigan Association of Osteopathic Physicians and Surgeons (both members and nonmembers).

I. GP-N stands for the sample of medical doctors in general practice in the northern, more rural, counties of Michigan. (See map of Michigan.) There were 302 doctors in this group. A sample of one out of four was chosen by random numbers from an alphabetical listing of the physicians in each county, and one county following another adjacent to it, so that if no physician was chosen from one county, that county would be represented by a doctor from an adjacent county.

II. GP-S stands for the sample of medical doctors in general practice in the southern, more urban, counties of Michigan. There were 1,920 in this group, and a sample of one out of 20 was chosen in the same manner as described.

III. DO stands for the sample of doctors of osteopathy. Excluding interns and residents, there were 1,924 osteopaths in all counties of Michigan (102 in the northern counties were included in the group). One out of 20 was selected in the same manner. It was realized that some of the DOs limit their practice, as do some MDs listed as GPs, but it was decided to consider them as one group.

IV. Ped. stands for the sample of pediatricians (all MDs). The original list of pediatricians from

Scientific papers

The author is Director of Child Health, San Bernardino County Health Department. Her survey was carried out as part of an experimental program in continuing education for medical personnel in Michigan by the Department of Health Development, School of Public Health, University of Michigan, and was supported by the Mental Retardation Division of the U.S. Department of Health, Education and Welfare.

The author would like to acknowledge the continuing interest and help of Donald C. Smith, MD, chairman of the Department of Health Development, and of Patricia A. O'Connor, MD, assistant professor, who shared the responsibility of this program. For the success of the survey, much credit and thanks go to the staff and interviewers of the Center for Urban Studies, Dearborn Campus of the University of Michigan, and especially to William M. Ladd, MA, Associate Director, and Myra Gross who supervised the interviewing. Invaluable help was also given by the author's husband, Willard R. Centerwall, MD, who helped code the many verbatim responses.

the AMA directory contained many residents in pediatrics at Wayne State University and the University of Michigan. These names were eliminated, and also, the names that could be identified as physicians in full-time academic positions or in institutions for the retarded. The intent was to survey physicians practicing in the community. In the final list there were 393 pediatricians, including 18 in the northern counties of Michigan. One out of five were chosen in the same manner as described for the GP-N sample.

The Questionnaire

The questionnaire contained 42 questions which could be answered in 30 minutes with the aid of an interviewer. There were several "open-ended" questions which were designed to encourage the physician to express his own feelings, The answers to these were recorded verbatim.

Besides demographic data, the questions dealt with the doctor's experience with the more severely retarded and with the mildly retarded. The physicians were asked to relate the questions to their experience with new cases seen the previous year. They were also asked if there was any information about the care of retarded children that they personally would like to have and to suggest how this might be made available to them.

The Interviews

The interviews were obtained by experienced interviewers under the direction of the Center for Urban Studies at the Dearborn Campus of the University of Michigan during April and May 1968. In almost every instance, the interviewers were graciously received, and have expressed their gratitude to those many doctors who gave generously of their time and interest. It was particularly difficult for interviewers to meet with some of the doctors in remote areas of northern Michigan, and in a few such cases the interviews were completed over the telephone.

Results and Discussion

There have been several fairly recent studies to determine the attitude of physicians toward the problems of the retarded child and particularly about counseling of the parents of these children. One of the drawbacks to these studies has been the selection of the samples which, in the case of the Olshansky[1,2] studies, were both limited and non-random, representing special groups of city and hospital-affiliated practitioners. Again, samples in the surveys reported by Parke, Davis and Company[3] and by Thaman and Barclay,[4] were "self-selected" from persons willing to fill in a questionnaire received in the mail.

The purpose of this present study was to describe the role of the general practitioners, both MDs and DOs, in caring for retarded children in Michigan and compare this with the role of the pediatricians. Interviews were completed with 142 (6.4%) of the medical doctors in general practice, 82 (4.2%) of the doctors of osteopathy, and 59 (12.5%) of the pediatricians. Because of the care with which the sample was chosen, and the large percentage of completed interviews, the results can be said to reflect to a high degree medical practice and opinion with regard to the care of the mentally retarded by these groups. **(Table 1)**

TABLE 1
Number and Per Cent of Interviews Completed

	GP-N+	GP-S+	DO+	Ped.+
Total Population	302	1,920	1,924	393
Proportion in Sample	1:4	1:20	1:20	1:5
No. in Original Sample	75	99**	96	73*
No. Moved from Area or Died	5	9	5	6
Actual Sample	70	90	91	67
No. ill	0	2	2	2
No. Refused	6	15	7	6
No. Completed	64	78	82	59
% Completed	91%	85%	90%	88%

** Increased by three doctors who were listed as pediatricians but were doing general practice only.

* Decreased from original sample by three doctors now doing only general practice and one doing only obstetrics.

+ GP-N MDs in general practice in northern counties (see map)
GP-S MDs in general practice in southern counties (see map)
DO Doctors of osteopathy throughout Michigan
Ped. MD pediatricians in private practice throughout Michigan

TABLE 2

Per Cent of Michigan Doctors Who Saw Retarded Children and the Number Seen

	GP-N+	GP-S+	DO+	Ped.+
	No (%)	No (%)	No (%)	No (%)
Total respondents	64	78	82	59
Did not see young children	7 (11)	13 (17)	21 (26)	0
Did not see young retarded children	7 (11)	27 (35)	20 (24)	1 (2)
Total who saw young retarded children	49 (78)	38 (48)	41 (50)	58 (98)
Median number of young retarded children per year by those seeing retarded children	1-2	1-2	1-2	10
Saw no children with school problems	9 (15)	13 (17)	8 (10)	1 (2)
Total who saw school problems	47 (74)	52 (67)	53 (64)	58 (98)
Median number of school problem children per year* by those seeing school problems	10	10	10	50

---

* 5% or less of these were judged to be mentally retarded

+ GP-N MDs in general practice in northern counties (see map)
GP-S MDs in general practice in southern counties (see map)
DO Doctors of osteopathy throughout Michigan
Ped. MD pediatricians in private practice throughout Michigan

It is not surprising that the results of this more objective and complete sampling confirmed the findings of the previous studies. The estimate of the numbers of children seen was almost identical. The attitudes toward institutionalizing the severely affected child showed the same trend. Any difference can be accounted for by the way in which the questions were asked. All the doctors recognized the complexity of the problem, but also generally looked for prescribed solutions. For instance, almost no one alluded to the variability of Mongolism, although a significant number of doctors recognized the variability of the family situations.

Putting together the pieces of data from the present study, we begin to see the total picture of retardation from the point of view of the general practitioner. (**Table 2**) He sees zero to two new cases a year. He cannot tell the parents exactly what caused the retardation; he is not sure what the ultimate abilities of the child will be; he has little that is hopeful to offer the parents. From one-quarter to one-third of these doctors will depend on their own evaluation and follow the child with both counseling and medical treatment. A very small number have a special interest in the problems of the mentally retarded, in which case, as with pediatricians, they see many more of these children than their colleagues. Most of these are physicians in practice 15 years or longer. The majority of GPs refer retarded children to various specialists and clinics, and prefer not to be involved in their continuing care, except to treat acute illnesses. (**Table 3**)

For the pediatricians the picture is quite different. They see new cases of mental retardation every month. Ten per cent (6) saw more than 50 cases per year. Seventy-five per cent do their own work-ups and follow these children with counseling about management relative to the mental retardation, as well as medical treatment. About 25 per cent prefer to send these children to other doctors, or, more frequently, to a clinic. The pediatrician is as acutely aware as the GP of his limitations in knowledge and armamentarium in dealing with the problems causing mental retardation. As shown by Koch,[5] he may have even more trouble than the GP in his relationship to the parents, apparently because he is the one who gives the "final" diagnosis. Many of the quotations express the doctor's dilemma in this regard. Some indicated their great sympathy for the parents. They used such phrases as "go slow" or "soft" and "gentle." "You must give the parents a feeling of hope," said one. "It's a tough one," said another. Just how tough is indicated by this answer: "Usually the doctor who make the diagnosis loses the patient."

As with the GPs, there are some pediatricians, about 15 per cent in this study, who have taken a special interest in mental retardation. These are the only pediatricians, (some are pediatric neurologists), who see large numbers of retarded children, and they are the only ones who get a large number of referrals from other doctors. Most pediatricians find that more of their cases are picked up by themselves or self-referred by the parents.

One of the most interesting findings was the difference in degree of involvement of family doctors with children with school problems. The average number of new school-problem cases seen was five to 10 times that of young retarded children (**Table 2**). These doctors also claim that 5 per cent or less of school problems are associated with mental retardation, so the number of mildly re-

TABLE 3

Management by Those Doctors Who Saw Retarded Children*

	GP-N+	GP-S+	DO+	Ped.+
	%	%	%	%
Thought family doctor should give continuing care	7	6	10	42
Referred patient for diagnosis and counseling	75	68	63	25
Referred to State residential institution	41	28	23	68
Referred to local school program	40	20	30	62
Referred to local training or vocational program	18	13	15	42
Referred to local parent group	17	13	10	47

---

* See Table 2

+ GP-N MDs in general practice in northern counties (see map)
GP-S MDs in general practice in southern counties (see map)
DO Doctors of osteopathy throughout Michigan
Ped. MD pediatricians in private practice throughout Michigan

tarded seen by doctors is about the same, or less, than the number of more severely retarded.

It would be interesting to know more about the large group of children who are having learning problems for other reasons than primary mental retardation. Unfortunately, this survey was not designed to explore these problems, nor was the magnitude of the problem anticipated.

The doctor's attitude toward early institutionalization of the more severely affected child was most effectively crystallized by asking his opinion about the care of the Mongoloid child. It is as if he must equivocate about retarded children in general, because, in many cases, he feels uncertain about the outcome. In the case of Mongolism, the doctor feels sure that he is talking about a hopeless case.

The question the doctors were asked was, "What advice would you give parents with a newborn Mongoloid baby about caring for the child at home or putting him in an institution or foster home?" Fifty-five per cent and 52 per cent of the GP-N and GP-S groups, respectively, were for early institutionalization. Forty-six per cent of the DOs agreed with them. In contrast only 24 per cent of the pediatricians favored early institutionalization. Also, more pediatricians recommended home care, 36 per cent as compared with 16 per cent of GPs and 22 per cent of DOs. The pediatricians have also become more concerned with trying to suit the solution to the particular family situation. Seventeen per cent of them would let the family decide, as compared with 11 per cent of the GP-S, 5 per cent of the DO and none of the GP-N groups.

The great variation in points of view is seen in these typical quotations.

"I recommend institutionalization, but in my experience, it is rarely followed. They usually keep the child until they can't manage any longer."

"I don't let the mother see the baby if she is not taking it home."

"I advise the large proportion to care for baby at home. Only 2 in 38 years of practice could not do this."

"What I would do myself and what I'd tell a patient to do would be two different things. A Mongoloid is a loveable child and I'd tell them to take him home and love him, but if he were mine, I'd put him in an institution."

"I would recommend an institution. They are more specialized, having grants for studies and the newest information on care."

"Put in institution. I was taught this at medical school. Now, according to all I read, we are doing an about-face. The popular idea is to keep the child at home. I feel cynical about this."

"Institution, if other children. If not, home, because he wouldn't survive institutional care."

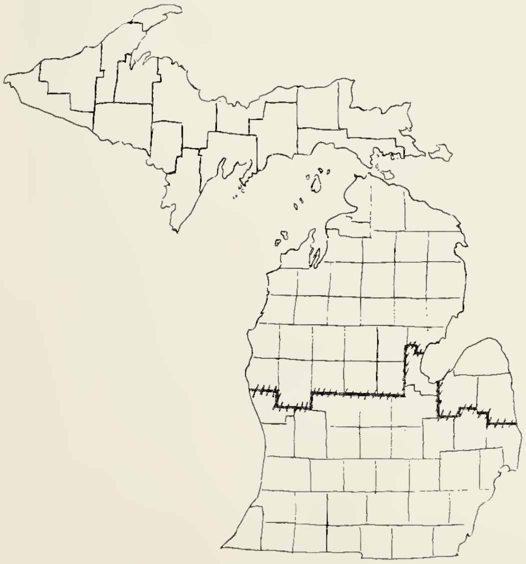
These reflect ambivalence and even confusion with the changing attitude toward institutionalization. How can it be that what was the "perfect answer" 10-15 years ago is wrong today?

When the doctors were asked if there was any information about the care of retarded children that they would like to have, the overall response was negative, or neutral, at best. From 39 per cent to 48 per cent of all groups said they did not want any information. A large per cent of those who made some suggestion desired information about facilities for the retarded. Some said they needed to know "everything," including 25 per cent of DOs, 19 per cent and 16 per cent of GPs, but only five per cent of pediatricians. The doctors were then asked how they thought the information they wanted could be made available to them. Only five per cent of DOs, seven per cent of pediatricians, and two per cent of GPs expressed a preference for presentations at medical meetings. The rest suggested printed materials or they didn't know.

The GPs were divided into two groups to see if being in more rural and isolated communities would affect the opinions and practices of GPs. The following things were noted about the GPs from the northern, more rural counties: They are slightly younger; a larger per cent saw retarded children; a larger per cent find they pick up cases of retardation themselves (fewer cases referred or self-referred); a larger per cent see school problems referred by welfare agencies; a larger per cent refer school problems to child guidance clinics, and a larger per cent express their opinion about the need for day school facilities for the retarded in their area. Most of these differences seem to be readily explained by the more isolated situation. In other ways northern and southern GPs were similar.

Conclusions

The pediatricians are taking the largest share of the cases of retarded children in Michigan. Already there are many pediatricians who are taking a special interest in mental retardation, but there are some GPs who are, also.



Dark line divides counties of the northern sample (GP-N) from the counties of the southern sample (GP-S)

Post-graduate education in mental retardation probably should aim at keeping pediatricians up to date in this field, and make it possible for doctors who are particularly interested to increase in depth their skills in the field of child neurology and mental retardation.

In Michigan there are about 74,000 births a year. If we use the oft-quoted figure of three per cent retarded, Michigan has about 2,200 new cases of retardation per year. But only one-fourth of these, or about 715, are in the moderately to severely retarded range. Even if some were identified for the first time in the first year of life and some in the second, etc., the average number of "new cases" should be the same. But our data says that half of the 4,000 generalists, both MDs and DOs, see 1-2 cases per year, and even if only a quarter of them work up and keep these cases, there would be 500 (doctors) x 1.5 cases or 750 cases worked up by family practitioners. There are also 393 pediatricians who are seeing an average of 10 new cases per year, making almost 4,000 more; not to mention clinic work-ups. This large number probably includes some mildly retarded. However, it seems reasonable to conclude that most moderately and severely retarded children are seen by several doctors, often without the doctor being aware that the family has had one, two or more previous opinions.

A possible answer for a state like Michigan may be the establishment of a number of public-supported centers scattered throughout the state which are equipped to do diagnoses and counseling for the mentally retarded (ideally they should handle all congenital, handicapping problems of children). Every handicapped child should be able to go to the nearest clinic, even including travel expenses, if he lives in a remote area and the parents can't afford transportation. The complete and authoritative evaluation of such a center would satisfy most parents. Parents could choose to go to a private physician, but all of these cases also should be registered at the regional center so that if the parents refer themselves to the center later, a record of tests and therapy by the private doctor would be available.

That there were many doctors who asked for information about facilities for the retarded indicates that they are interested in appropriate places to refer these children and would welcome a program of this kind. Some of the doctors took the opportunity of the interview to express their concern that especially trained professional people were not sufficiently available to help families meet the very difficult problem of a retarded child.

Summary

A representative sample of Michigan medical doctors in general practice (6.4 per cent), Michi-

gan doctors of osteopathy (4.2 per cent) and Michigan medical doctors in private pediatric practice (12.5 per cent) in April and May 1968 completed a questionnaire concerning their practice with regard to mentally retarded children. The questionnaires were administered by professional interviewers.

It was found that only half of all the generalists (MD and DO) considered that they saw any retarded children at all. The average number seen by those that did was estimated as one to two new cases per year. About 75 per cent of these were referred to other doctors for diagnosis and counseling.

The pediatricians each saw an average of 10 new cases of moderate to severe retardation per year (10 per cent saw over 50 new cases per year). Eighty per cent of these doctors do the work-up and follow-up of these retarded children. The remainder refer them to special clinics.

An expression of a special interest in mental retardation was limited to one to two per cent of GPs and 12 per cent of pediatricians. There was only a limited expression of interest in post-graduate education in mental retardation by any of the doctors. Most doctors just want up-to-date information about where to refer these children.

A question about institutionalizing newborn Mongoloids confirmed that about 50 per cent of general practitioners and 25 per cent of pediatricians believe in immediate institutionalization of these babies and would so tell the parents.

Since the State of Michigan has about 74,000 newborns a year, it can be estimated that new cases of moderate to severe retardation are about one per cent of this or less. The much larger number of "new cases" seen by all doctors indicates that there is much over-referring with duplicate evaluations of these patients. Much of this is probably due to "shopping around." It is suggested that if complete state-supported diagnostic and counseling facilities were available to everyone, and a state registry were kept, that this practice could be minimized.

It is suggested that continuing education in mental retardation should be directed mostly to the needs of pediatricians.

Bibliography

1. Olshansky, S. and Sternfeld, L.: Attitudes of Some Pediatricians Toward the Institutionalization of Mentally Retarded Children. *The Training School Bulletin* 59:67, November 1962.
2. Olshansky, S., Johnson, G. C. and Sternfeld, L.: Attitudes of Some GP's Toward Institutionalizing Mentally Retarded Children. *Mental Retardation* 1:18, February 1963.
3. Physician Survey on Mental Retardation. Patterns of Disease, Parke Davis and Company, Detroit, March 1964.
4. Thaman, A. M. and Barclay, A.: Physicians' Attitudes Toward Institutionalization of Mentally Retarded Children. *Missouri Medicine,* 62:209, March 1965.
5. Koch, R., Graliker, B. V., Sands, R. and Parmelee, A. H. Sr.: Attitude Study of Parents with Mentally Retarded Children. *Pediatrics* 23:582, March 1959.

The hazards

Of drug addiction on a trauma ward

By Ronald L. Krome, MD
Anna Ledgerwood, MD
Charles E. Lucas, MD
Detroit

The problems related to drug addiction have increased markedly over the past few years.[1, 10] What was once thought to be a transaction conducted only in a ghetto alleyway has become a blatant and open business arrangement throughout most cities and suburbs.

Intra-hospital trafficking in illicit narcotics has become an extension of this phenomenon, especially on trauma wards where many of the patients are victims of wounds sustained while attempting either to obtain funds to maintain their habit or to avoid retribution for being unable to "pay off" their suppliers.

Once in the hospital, the addict's needs persist. A sudden enforced abstinence of narcotics or appropriate substitutes following emergency surgery thus produce a withdrawal syndrome which may complicate both the subsequent hospital course and camouflage important clinical findings.[12]

Sometimes these needs are met by the attending physician who prescribes appropriate drugs to prevent withdrawal. Rehabilitation may thus be deferred until shortly before the patient is ready for discharge when outpatient treatment may be arranged if the addict desires such treatment. Almost all of these patients, however, revert to their previous state of addiction following discharge in spite of subsequent attempts at rehabilitation.

Unfortunately, some patients feel that their needs are not being met in the early postoperative period so that they seek help within the hospital from a non-medical source. This source, usually a "friend," brings in illicit narcotics at all hours of the day in spite of restricted visiting periods. Such transactions are becoming more frequent and there appears to be little that can be done to prevent them.

Recently we have found reason to implicate this type of illicit narcotic administration in the deaths of two patients who were recovering from abdominal surgery following abdominal trauma. Both patients died suddenly following a "fix" supplied by friends. The dosage received appeared to be within their normal tolerance suggesting that this tolerance decreased during the convalescent period. We have summarized the important facets of these cases in the hope that the medical community may become aware of this problem and an intelligent, well-thought-out program of management may be developed to prevent similar deaths.

Case Reports

Case No. 1

A 30-year-old male presented to the emergency department following a gunshot wound of the abdomen. Vital signs were stable on admission and the patient was prepared for an exploratory laparotomy. Through-and-through perforations of the stomach, duodenum, jejunum, transverse colon and right lobe of the liver were found. The liver laceration was approximately 1.5 cm in greatest diameter and was not bleeding. Primary closure was performed for the stomach, duodenal and jejunal injuries. The perforated transverse colon was brought out as a loop colostomy. Following this, the abdomen was irrigated with saline, drained with soft rubber drains and the incision was closed. The patient did well except for mild atelectasis and temperature elevation on the first postoperative day, both of which cleared by the next morning. At approximately 2 a.m. of the second night he had a visitor who, according to the other patients on the ward, was recognized by the patient and appeared to be his friend. The visitor pulled the curtain around the bed and appeared to inject something into the intravenous tubing. Prior to his departure, he and the patient again exchanged pleasantries so that the other patients were convinced of their friendship. Almost immediately after the visitor's departure the patient began to convulse. The ward personnel, including nurse and physician, were called quickly to the bedside, but by that time the patient was in severe respiratory distress. Very shortly thereafter he developed a cardiorespiratory arrest and

---

The authors are with the Department of Surgery, Wayne State University School of Medicine, and Detroit General Hospital. Their paper is supported by the Detroit General Hospital Research Corporation.

expired despite attempts at resuscitation. Postmortem examination revealed bilateral pulmonary congestion. The right lung contained multiple small pulmonary emboli. The right and left lungs weighed 600 and 500 Gm respectively, and histologically contained intra-alveolar proteinatious fluid. Urine samples for quinine were positive and the urine morphine level was 3.5 mg. per cent. Both of these compounds are found in the urine after intravenous heroin administration.[3] The patient had received no prescribed narcotics for more than 10 hours prior to his death.

Case No. 2

A 22-year-old male presented to the emergency department with a gunshot wound of the right groin and flank. Vital signs were stable, and the patient was taken to the operating room for abdominal exploration. Perforations of the distal ileum and cecum and a complete transection of the right hypogastric vein were found. The hypogastric vein was ligated and the perforated ileum and cecum were resected. A primary end-to-end anastomosis was performed between the proximal ileum and the ascending colon. His immediate postoperative course was essentially uneventful except for mild atelectasis on the first postoperative day which responded to coughing and deep breathing. He did well until about 5 p.m. of the third day when he became slightly confused and hypotensive (BP 90/40 mm Hg). This happened shortly after his visitors left. It has been subsequently ascertained that immediately prior to this hypotensive episode he had sniffed either "skag" or cocaine which had been supplied by his visitors. He was known to sniff both prior to admission and we have been unable to determine which compound was used. The physician who cared for the patient noted that patient was "drowsy" but he was unable to account for the slight fall in blood pressure. The blood pressure responded rapidly to intravenous fluids although the drowsiness persisted. Two hours later, on evening rounds, the patient was alert and appeared normal. He remained stable until approximately 10:30 p.m. that night when he suddenly became confused and within five minutes began convulsing. The patients in the adjoining beds noted that this began shortly after he began to sniff the remainder of the powder which had been brought to him that afternoon. The ward nurses and physician quickly came to his aid but he too had a cardiorespiratory arrest within a few minutes. Resuscitation was provided but without success. Postmortem examination revealed bilateral congested wet lungs weighing 650 to 550 Gm, respectively. Histologic examination showed interstitial edema. Urine and blood samples were negative for alkaloids although no examination was made for cocaine derivatives.

Discussion

Deaths from drugs and their related problems are increasing at an alarming rate. In New York City, alone, this is the leading cause of death in the age group 17 to 35 years. [10] Furthermore, the medical-surgical sequalae of drug addiction account for many more admissions to general hospitals [1, 2] so that drug abuse is becoming more of a major public health problem every day. Sudden death during or shortly following intravenous narcotic administration has become a relatively commonplace event in urban areas. [4, 11] Addicts have been found dead with the needles still in their veins.[4] Nobody has previously directed attention to in-hospital deaths of this type.

Obtaining reliable information as to the details surrounding this type of incident is a delicate and difficult undertaking. The patients witnessing the events are reluctant to discuss in detail what they saw unless they are confident that the physician's primary concern is the public health factor rather than law enforcement. In each of the above instances, certain patients in adjoining beds related well to the physician so that quite detailed descriptions were provided to us. These details would most certainly be concealed in the advent of a police investigation.

The exact mechanism of sudden death following narcotic administration has never been fully elucidated although overdosage has certainly been responsible in many such cases. The one consistent finding on subsequent postmortem examination is a wet, heavy, fluid-filled lung, sometimes likened to "shock lungs."[4, 11]

This phenomenon appears to occur quite rapidly following injection so that the pulmonary changes may reflect an allergic reaction and must be distinguished from the chronic obstructive pulmonary changes seen in the "blue velvet syndrome." This latter syndrome occurs when patients administer intravenous paraldehyde and codeine mixed with a talcum powder over a long period of time. The talc becomes lodged in the pulmonary arterial tree and causes a chronic form of progressive pulmonary hypertension and subsequent cardiorespiratory failure.[13]

Recently, cerebral edema and nerve cell injury have been found in the brain sections of addicts who have suddenly expired.[10] Quinine is often mixed with heroin and a recent report has suggested that cardiotoxicity may be produced by the intravenous injection of this drug leading to an arrhythmia and sudden death.[7] This may have played a part in the sudden death of Case No. 1.

The mechanism of death following sniffing of either "skag" or cocaine is even more difficult to comprehend. "Skag" is a mixture of heroin and quinine made up in varying concentrations depending on the addict's needs, and really is but one of several more contemporary names for heroin. The price of this compound varies depending on the quality, supply, and demand. Apparently the dose requirement in Case No. 2 was low so that acquisition of a properly mixed preparation for this patient could not have presented a logistics problem for his visitors. Cocaine "sniffing" has caused sudden death which is usually preceded by confusion, drowsiness and respiratory difficulty.[8] The absence of alkaloids in the urine of this patient suggests that the powder which was "sniffed" may have been cocaine.

Respiratory difficulty,[6, 1, 13] hypotension,[8] mental aberrations, restlessness and hepatic dysfunction[6, 9] all have been known to occur in the narcotic addict before, during, and immediately following surgery.[12] Most of these findings have been attributed to withdrawal but in the future, physicians must consider the possibility that some of these symptoms may be related to intra-hospital narcotic administration to patients who have a decreased tolerance following surgery. If such is true, then it is imperative that physicians caring for these addicts take care to forewarn them of their altered tolerance in the convalescent period. We have now made this our practice on the trauma service in the hopes that these patients will avoid returning to their previous dose level until they are fully recovered.

Prior to elective major surgery it is preferable to cure or minimize an addict's needs since postoperative withdrawal is easily confused with postoperative complications and as such might influence the outcome of surgery. Ignoring this problem is comparable to ignoring diabetes in a surgical patient.

Physicians working in an inner city general hospital must recognize that narcotic addicts will do all that is necessary for them to maintain their habits, especially when one understands that illicit drugs are available in the hospital. In the absence of a critical emergency requiring early surgery, a narcotic addict should be detoxified or stabilized preoperatively.[5] The use of methadone given as a 30 mg injection in the intra-operative and/or postoperative period may serve to provide both a physiologic and psychologic heroin blockade and make for a smoother postoperative course. A lesser dose of 10 mg every four hours as needed usually is sufficient if the patient is in the withdrawal phase. Such a program is currently in progress on our trauma service and is recommended for other surgical services.

Summary

The dangers of drug addiction extend beyond the street and into many urban hospitals. Recently, two young men died after receiving illicit narcotics supplied by friends who visited them while they were convalescing from abdominal gunshot wounds. It appears that the injury and subsequent major emergency operation reduced their tolerance for the drugs to which they had become addicted. A plan of prevention using methadone as a heroin blockade is proposed.

References

1. Brill, H.: Death and Disability in Drug Addiction and Abuse. Ann. Int. Med., 67:205, 1967.
2. Cherubin, C. E.: The Medical Sequela of Narcotic Addiction. Ann. Int. Med., 67:23, 1967.
3. Dole, V. P., Kim, W. K. and Eglitis, I.: Detection of Narcotic Drugs, Tranquilizers, Amphetamines, and Barbiturates in Urine. J.A.M.A., 198,349, 1966.
4. Helpern, M. and Rho, Y.: Deaths of Narcotism in New York City. New York State J. Med., 66-2391, 1966.
5. Hoffman, L.: A Methadone Program for Addicts with Chest Disease. J.A.M.A., 211:977, 1970.
6. Louria, D. B., Hensle, T. and Rose, J.: The Major Medical Complications of Heroin Addiction. Ann. Int. Med., 67:1, 1967.
7. Luporrch, R., Pilewski, R., Sapira, J. D. and Juselius, R.: Cardiotoxicity of Quinine as Adulterant in Drugs. J.A.M.A., 212:1216, 1970.
8. Mark, L. C., Marx, G. F., Arkins, R. E., Kepes, E. R., Radnay, P. A., Ravin, M. B. and Steen, S. N.: Hypotension During Anesthesia in Narcotic Addicts. New York State J. Med., 66:2685, 1966.
9. Marks, V. E. and Chapple, P. A. L.: Hepatic Dysfunction in Heroin and Cocaine Users. Brit. J. Addiction, 62:189, 1967.
10. Richter, R. W., Baden, M. N. and Pearson, J.: Quoted in *Medical News,* J.A.M.A., 212:967, 1970.
11. Siegel, H., Helpern, M. and Ehrenreich, T.: The Diagnosis of Death from Intravenous Narcotism. J. Forensic Sci., 11:1, 1966.
12. Tinckler, L. F. and Baratham, G.: Opium Addiction and Surgery. Brit. J. Surg., 53:576, 1966.
13. Wendt, V. E., Puro, H. E., Shapiro, J., Mattews, W. and Wolf, P. L.: Angiothrombotic Pulmonary Hypertension in Addicts, J.A.M.A., 188:755, 1964.

Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This 23-year-old, black, A-negative mother was seen for the first time in labor at 35 weeks. She had obvious polyhydramnios but had not sought prior prenatal OB help. After four hours of labor she delivered a 4 lb. 3 oz. female infant. The mother denied any problem in pregnancy and stated her only other pregnancy resulted in a live son of two who is healthy and well at home.

Fetal

After birth this black female infant cried and breathed spontaneously. Initial physical exam was normal. Cord blood was A+ with 2+ Coombs and Indirect Bilirubin of 2.3 mgm per cent. The first 24 hours of life were not remarkable except that the infant did not have a bowel movement. On the second day of life she vomited bilious material on one occasion and was noted to have a little abdominal distension. She did have a meconium stool after stimulation with a rectal thermometer. X-Ray of the chest was normal but flat plate of the abdomen revealed only gas in the stomach and slight amount in the Sigmoid Colon. The X-Ray was read as normal. Bilirubin value that day was 9.5 mgm per cent (Indirect). The infant was placed on formula and proceeded to have several episodes of bilious projectile vomiting. She was then placed on I.V. Fluid and made N.P.O. On the third day of life Bilirubin (Indirect) was now 14.5 mgm per cent and the infant vomited once despite N.P.O. and I.V. Fluid. An Upper G.I. Series was attempted and barium showed only dilatation of the stomach and duodenal cap with no progression beyond this point. The impression now was complete duodenal obstruction and surgical consultation was obtained. Surgery was deemed an emergency but because the Bilirubin was now 18.0 mgm per cent (Indirect) it was felt that an exchange transfusion should be done first. This was accomplished without incident. Shortly after this the infant was taken to the O.R. where exploratory laporatomy failed to find any obstruction or reason for the symptoms she had. Immediately post-surgery the infant expired. Laboratory studies done just before surgery were as follows: Hemoglobin=14.4 gm, Bilirubin (Indirect)=12.0 mgm per cent, Sodium = 134, Potassium = 3-4, Chloride = 87, CO_2=21 and BUN=48. Although a post-mortem was performed no cause for death could be demonstrated.

Perinatal Committee Comments

1) Polyhydramnios in pregnancy should alert the pediatrician to possible congenital abnormalities, especially of the gastrointestinal and Genital-Urinary Tracts.

2) It is dangerous practice to try to continue to feed an infant that is persisting in vomiting.

3) The exchange transfusion clearly took precedence over the operation as long as hydration could be maintained by I.V. fluids. Otherwise if surgery had corrected an obstruction before an exchange was to be done, cerebral damage from hyper-bilirubinemia with kernicterus would likely result.

4) Although it could not be shown here, it is wise to point out that 80 per cent of patients with duodenal obstruction (including pyloric stenosis) quickly deplete glycogen stores so that despite I.V. glucose/water (if not sufficient) this could have played a part in the unexplained demise of this infant.

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

Aortosaphenous coronary artery bypass surgery

for obstructive coronary artery disease

By John Brady, MD
Ali Esfahani, MD
Walter Janke, MD
Flint

As the development of extracorporeal circulation brought many types of acquired valvular lesions from the realm of the pathologist to the skill and inventiveness of the surgeon, and congenital defects from the academic to the clinical arena, so has coronary angiography in stark clarity, illuminated the problem of obstructive coronary artery disease in terms of surgical attack.

Such is the enormity of the problem that at every possible level, various disciplines seek a solution ranging from prevention to cure; yet the statistics show that only one out of two people stricken from either coronary or cerebral arterial obstruction survives. The majority are myocardial infarctions. Death in this majority, is primarily due to lethal arrhythmias, on which the life saving coronary care units serve their greatest influence. The surviving patient leaving the hospital takes his problem with him, the risk remains. Death has been delayed, perhaps only until the next inevitable encounter, unpredictable growth of collateral vessels, being the determining factor. Those familiar with diagnostic coronary angiography are well acquainted with the frequent paradoxical diversions between degrees of coronary artery obstruction and anginal pain. A normal or slightly abnormal resting electrocardiogram may lull both patient and physician into a state of complacence. It is, however, fact that such an electrocardiographic interpretation may occur even in the process of severe or life threatening disease. This statement needs no research. The proof is found in the numbers of patients not surviving the first attack, often having received a comforting annual physical examination and the blessing of such a benign electrocardiographic interpretation. The patient thereafter assumes the accompanying license to indulge in every atheromatous producing excess known. The fat get fatter, the smokers delay, the sedentaries sit and the risk remains the problems of the other fellow. Routine coronary angiography could fill the role of diagnoses that mass chest roentgenography supplied in the control of pulmonary tuberculosis. The small risk of obtaining this vital information from coronary angiography is well documented. The possible benefit for the patient from resulting saphenous coronary artery bypass surgery may be, with the passage of time even greater than we currently hope. The great majority of afflicted patients satisfy the criteria of proximal obstruction with demonstrated adequate distal vessel size. The distal vessel may be seen filling retrograde by a collateral vessel or delayed opacification from antegrade flow.

A successful bypass results in immediate perfusion along the natural channels of arterial blood flow, without the unpredictable principles of collateral development being relied upon for successful revascularization, upon which the Vineberg-Sewell procedure depends for its success. The results of this new coronary artery surgery have been dramatic.

Material and Methods

Selective coronary angiography, lipid profile, glucose tolerance tests and maximum capacity multistage treadmill testing have been carried out on 450 patients clinically determined to have ischemic heart disease or a high probability of such. Until December of 1969 revascularization procedures of the Vineberg-Sewell type were used. Since that date this procedure has almost been totally replaced by the aortosaphenous coronary artery bypass. Forty patients have undergone a total of 52 bypasses with a single mortality representing a 1.9 per cent bypass mortality or 2.5 per cent patient mortality. Twenty patients have been restudied with a patency rate of 80 per cent. An occluded graft was found in only one out of the last ten patients restudied.

Selection of Cases

Essentially, the limiting factor is the extent of distal disease and the size of the vessel involved. Bypass grafts have successfully been accomplished with lumen diameters of 1.5 mms. especially in the anterior descending. Extensive fibrosis, congestive heart failure of long duration, valvular

---

Doctor Brady is director of the cardiac laboratory at St. Joseph Hospital, Flint. Doctor Esfahani and Doctor Janke are in private practice in Flint.

complication and myocardial aneurysm formation must also be considered when the risk versus the benefits of surgery are balanced. In practice, few patients fall outside the increasing area of bypass capability. Even if only one bypass is feasible when three will be preferable some improvement must follow. Experience is rapidly increasing the therapeutic spectrum, as the previously speculated guesses of mortality and morbidity have been found to far exceed actual figures to date. Selection, therefore, is encompassing a broader and broader group of patients: Some of whom, would have fulfilled the criteria for heart transplant consideration, in respect to any definitive surgical procedure in the past.

Discussion

Principles of successful surgery may vary from one center to another but the objectives are clear and practically speaking only one, that is a functioning graft in a myocardium suffering no damage from the procedure. We feel that the graft must be accurately placed to involve the maximum area of ischemic myocardium, and the sutures meticulously inserted around the intima and at the commissures with the least possible trauma to both donor and recipient vessel. The avoidable narrowing at this point invites thrombosis which would extend along the sluggish pathway traveling proximal to the graft region to totally occlude the involved coronary vessel. An immediate and probably fatal infarction will result. We further believe and have demonstrated in our series, that measures to produce myocardial oxygen demand reduction or a quieter area of suture, either by hypothermia or extracorporeal circulation with electrically produced ventricular fibrillation are unnecessary in the vast majority of cases, and generally speaking may only be needed in the circumflex vessel. These measures cannot but fail to slow coronary perfusion, change cellular blood components, increase anaerobic metabolic by-products, all of which will tend to increase ischemia, the risk of operative infarction and the environment for thrombus formation. A strong flow of flushing blood along these vessels is required throughout the procedure to ensure a successful continuation of coronary and bypass blood flow. There should be a minimal time elapse during the critical period of anastomoses.

Postoperative evaluation is far more specific and dramatic, with little doubt as to the efficiency of the graft, than previous myocardial revascularization procedures. A successful implant is not accompanied by any significant pathological enzyme rise or electrocardiographic change unlike former revascularization procedures. Improvement in a previous abnormal electrocardiogram is initially confined to minor S-T segment changes, more commonly there is no immediate change.

The most impressive finding among our series, is the many times increase in exercise tolerance obtained between the pre- and post-operative multistage treadmill exercise test. There is a direct correlation between this study, the dramatic clinical improvement in symptomatic patients and the angiographically demonstrated graft patency.

The operative risk, the chance of success, the possible degree of benefit, the consequence of graft occlusion (and one must assume associated coronary occlusion at the point of junction) can be assessed to a fair degree of accuracy from the pre-operative coronary angiogram. Such factors as vessel size, location of the obstruction, presence or absence of supporting collateral vessels, degree of myocardial dependency on the vessel involved and the selected site of the graft in relationship to overcoming one set of obstructions or another set of obstructions become all more significant as experience is gained on the management of these patients. By experience and examination of surgical angiograms the proper choice becomes less of a problem.

All patients undergoing surgery had appropriate medical treatment for any co-existing risk factor, had received standard exercise treadmill tests and postoperative assessment was based on subjective symptomatology, clinical examination, the results of selective coronary angiography and selective graft angiography and repeat maximum capacity multistage treadmill tests. The correlation between these studies and graft patency was so uniformly similar that accurate prediction of the state and physiologic benefit of the graft was possible before angiographic evidence.

Summary

The significance of saphenous aorto-coronary bypass surgery as a major breakthrough in the management of patients with obstructive coronary arteriosclerosis is emphasized. By proper evaluation, improved surgical techniques, the risk has been found in our experience to be no greater than that of most major abdominal surgical procedures.

Forty patients have undergone a total of 52 bypasses with a single mortality representing a 1.9 per cent bypass mortality or 2.5 per cent patient mortality. Twenty patients have been restudied and the patency rate found to be 80 per cent. Only one out of the last ten patients restudied had an occluded graft.

Clinical improvement on symptomatic patients is dramatic. This has a direct correlation with the many times increase in standard exercise treadmill tolerance as well as with the postoperative patency of the saphenous bypass graft.

Atypical endocervical hyperplasia and oral contraceptives:

Report of a case

By Hushang M. Payan, MD
Ishpeming

Certain adverse reactions of oral contraceptives, namely thromboembolic phenomenon, have been suspected for some time. Recent studies confirm a definite association between the use of these drugs and the incident of thromboembolic disorders.[4, 11]

Along the same lines neurologic catastrophes,[1] Budd-Chiari syndrome[9] and retinal disorders[11] have been reported. Changes in serum iron,[6] glycogen contents of the blood,[7] alkaline phosphatase activity of the polymorphonuclear leucocytes,[8] and liver function tests have also been reported as possible[11] side-effects of oral contraceptive therapy. Within the past year or so, an atypical glandular hyperplasia of the endocervix has been described in women taking oral contraceptives, which in gross gynecologic and histopathologic examination "simulates" adenocarcinoma.[2, 3, 5, 10] The purpose of this communication is to report a case of such an atypical cervical hyperplasia with follow-up biopsy revealing complete regression of the atypical glandular proliferation four months after cessation of the drug administration.

Case Report

The patient, a 34-year-old white female, complained of back pain. On gynecologic examination a papillary polypoid growth of the endocervix was noted giving the impression of a malignant tumor. The patient had been taking Enovid for four years. The dose was 10 mg. the first two years and then reduced to 5 mg. for the last two years. The remainder of the history and physical findings were nonrevealing. In the cervical biopsy specimen there was proliferation of the glands, some of which were back to back. Daughter gland formation was also noted with groups of epithelial cells collecting around each other disclosing an abortive attempt of gland formation. The epithelial cells were cuboidal rather than columnar, nuclei were relatively large, hyperchromatic, and showed moderate morphologic variation. A few of the glands were dilated and cystic, but most of them were very small. Stroma was scant, edematous, and infiltrated by atypical cells similar to the epithelial cells described above and occasionally simulating signet ring cells (these cells were periodic acid Schiff negative). Very few vessels were noted. A few plasma cells, round cells, and polymorphonuclear leucocytes were also seen (**Fig. 1**).

The slides were examined by pathologists in six different institutions. Half of the pathologists felt that the lesion was malignant. The oral contraceptive therapy was stopped; the patient was put under observation with frequent periodic pelvic examinations. Another cervical biopsy was obtained after four months. Gradual regression of the polypoid cervical lesion was noted on gynecologic examination. Examination of the second biopsy revealed a few glands lined by regular tall columnar epithelial cells. The stroma, however, was quite edematous. Many capillaries were noted with prominent endothelial cells (**Fig. 2**). The patient has been followed in the clinic for over a year and now is in good health.

Discussion

Atypical hyperplasia of the endocervical glands has been reported in woman taking oral contraceptives.[2, 10] Both in gross gynecologic and light microscopic examination these lesions simulate adenocarcinoma. Familiarity and recognition of the lesion by both gynecologists and pathologists

---

The author is with the Departments of Pathology of the University of Wisconsin, Madison, and Bell Memorial Hospital, Ishpeming.

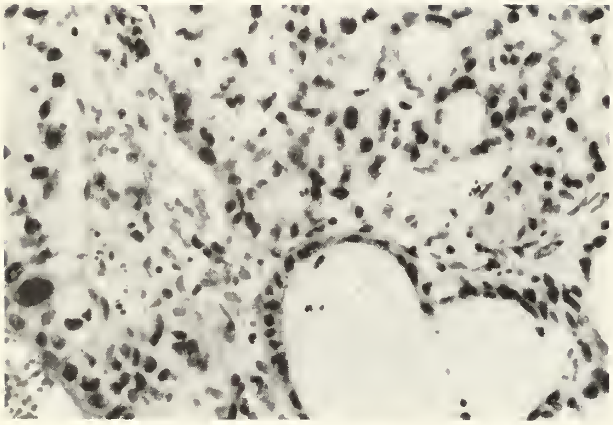


Fig. 1. Biopsy of endocervical papillary lesion following four years of oral contraceptive therapy reveals marked morphologic variation among the epithelial cells, severe glandular proliferation, some of which are back to back, and abortive attempt of gland formation (Hematoxylin and Eosin x 100)

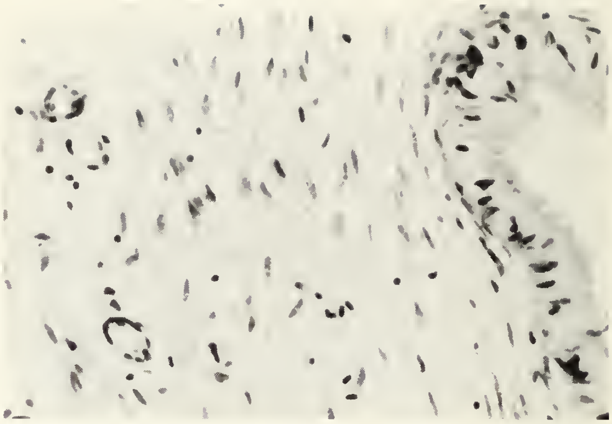


Fig. 2. Complete regression of the lesion four months after cessation of therapy. Loose edematous connective tissue around the few glands reveals many capillaries with prominent endothelial cells. (Hematoxylin and Eosin x 100)

are of great importance to the patient's care. Among the recorded cases, the present one is unusual in that a four months' follow-up biopsy was performed and revealed complete regresson of the lesion. A further proof that such atypical hyperplasia is most probably due to contraceptive therapy.

Summary

A 34-year-old patient who was on oral contraceptive therapy for four years developed a papillary endocervical growth simulating adenocarcinoma in gynecologic and pathologic examination. The contraceptive therapy was stopped, the patient was observed for four months, the cervical biopsy was repeated and revealed complete regression of the atypical endocervical hyperplasia.

Bibliography

1. Altshuler, J., McLaughlin, R., and Neubuerger, K. Neurologic catastrophe related to oral contraceptives. *Arch. Neurol.,* 19:264-273, 1968.
2. Candy and Abell, M. Progestogen-induced adenomatous hyperplasia of the uterine cervix. *JAMA,* 203:323-326, 1968.
3. Gall, S., Bourggeois, C., and Maguire, R. The morphologic effects of oral contraceptive agents on the cervix. *JAMA,* 207:2243-2247, 1969.
4. Inman, W. H. and Vessey, M. Investigation of deaths from pulmonary, coronary, and cerebral thrombosis and embolism in women of childbearing age. *Brit. Med. J.,* 2:193-199, 1968.
5. Kyriakos, M., Kempson, R., and Konikov, N. A clinical and pathologic study of endocervical lesions associated with oral contraceptives. *Cancer,* 22:99-110, 1968.
6. Mardell, M. and Zilva, J. Effect of oral contraceptives on the variation in serum iron during the menstrual cycle. *The Lancet,* 23:1323-1325, 1967.
7. Merre, L., Gilbreath, E., and Pattison, S. Contraceptive effects on the glycogen contents of blood and menstrual discharge. *Obst. Gyn.,* 33:200-203, 1969.
8. Sammour, M. and Hilal, S. Alkaline phosphatase activity of polymorphonuclear leucocytes in relation to oral contraceptives. *Am. J. Obst. Gyn.,* 103:823-827, 1969.
9. Sterup, K. and Mosbech, J. Budd-Chiari syndrome after taking oral contraceptives. *Brit. Med. J.,* 4:660-661, 1967.
10. Taylor, H., Irey, N., and Norris, H. Atypical endocervical hyperplasia in woman taking oral contraceptives. *JAMA,* 202:637-639, 1967.
11. Vessey, M. and Doll, R. Investigation of relation between use of oral contraceptives and thromboembolic disease. *Brit. Med. J.,* 2:199-205, 1968.

Amniocentesis in early pregnancy:

Prenatal detection of genetic disease

By Roy Schmickel, MD
Arthur Bloom, MD
Bruce Work, MD
Robert Jaffe, MD
Ann Arbor

Recent advances in the fields of cell culture, cytogenetics, and bio-chemical genetics have now lead to the prenatal detection of a multiplicity of human diseases. By working with fetal cells obtained through amniocentesis, it is possible to detect, reliably and safely, both chromosomal disorders and inborn metabolic errors. The Antenatal Diagnostic Unit of the University of Michigan Medical Center has been formed as an interdisciplinary group to make this important medical advance available to the physicians and patients of Michigan. We will here discuss the technique of amniocentesis itself; the genetic indications for the procedure early in pregnancy; and the possible economic implications for the State.

Although amniocentesis has long been used as a means of managing the obstetric patient, amniotic fluid has been used as a source of viable fetal cells only since 1966.[1] Amniotic fluid may be obtained as early as the 13th-15th week of gestation by transabdominal needle aspiration. The uterus is located by manual palpation, the abdomen is cleansed with an antiseptic solution, and the patient is then given a local anesthetic over the puncture site. The uterus may be entered with a 5 inch, No. 22 stylet needle; the stylet is removed, and approximately 10-20 ml. of amniotic fluid are removed and placed in a sterile centrifuge tube. This method has proved safe since we have had no known complications in the 103 cases in which this procedure has been performed. This is similar to the experience of Nadler[2] in which 165 amniocenteses were performed with no evidence of increased maternal morbidity or fetal loss.

Having obtained the amniotic fluid, the cells are centrifuged at 300 X g. for 10 minutes to obtain a small pellet of cells. This pellet is suspended in two ml. of fetal calf serum, and the suspension is layered in two or three 25 cm^2 plastic culture flasks. The cells are allowed to attach for ½ hour before two ml. of tissue culture media (TC 199, Difco) are added. The cells are then incubated with changing of the medium every three days. After approximately two to four weeks of incubation, a confluent layer of cells is seen. Trypsin is added to the cultures to separate the cells from the wall of the flask. It is at this time that the cells can be subcultured and used for chromosomal karyotyping or biochemical assay.

The number of biochemical studies that can be done on the amniotic fluid cells is fairly small at the present time, but it is steadily increasing.[3] Those more common metabolic diseases which have been diagnosed prenatally are: Pompe's disease, Hurler's and Hunter's syndromes, Tay-Sachs disease, and galactosemia. Metachromatic leukodystrophy, lysosomal acid phosphatase deficiency, Maple Syrup Urine disease, Lesch-Nyhan syndrome, and methylmalonic aciduria have also been diagnosed antenatally. Other diseases have been diagnosed with less direct means and with less certainty. Since normal levels of enzyme activity in fetal cells are not well established, it is necessary that only laboratories experienced in working with amniotic fluid cells perform the biochemical tests.

Chromosomal studies may also be performed on amniotic fluid cells. While it is theoretically possible that maternal cells might contaminate the aspirated sample, in practice this is very uncommon. In all of the 103 cell cultures done in this laboratory, the sex of the fetus or child has been in agreement with the chromosomally determined sex. A karyotype of the fetal cells can be made within three weeks of the amniocentesis in about 95% of the cases. This means that if an amniocentesis is done at 13 weeks of gestation, the diagnosis of a chromosomal defect, such as mongolism, may be made by 16 weeks of gestation.

There are several classes of parents who have a high risk of having a child with a disease which can be diagnosed by amniocentesis. These persons are: 1) A parent who has had a previous child affected with a metabolic disease; 2) a mother over 40 years of age; 3) a parent with a translocation chromosome; and 4) a mother who has had a previous child with a chromosomal defect and who is over 35 years of age.

For metabolic diseases the incidence of recurrence is almost always that of an autosomal re-

---

The authors are with the Departments of Pediatrics, Human Genetics, and Obstetrics and Gynecology at the University of Michigan Medical School, Ann Arbor.

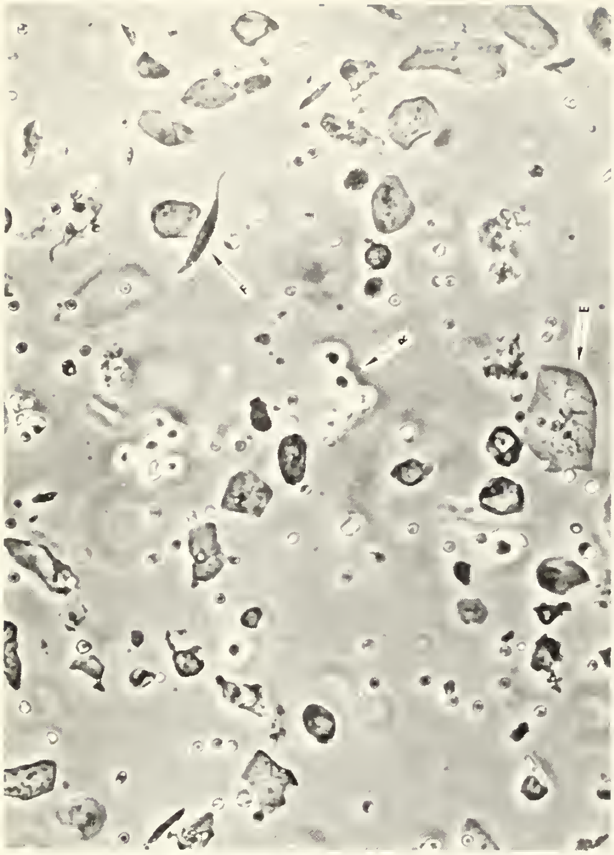


Fig. 1. Amniotic fluid cells in early culture (two to three hours). The large, squamous epithelial cells (E) are largely non-viable in culture. The small, round cells (R) are of amnion origin, and it is these which transform into the fibroblasts (F) which are usually the primary cells in these cultures.

cessive gene. Therefore, for parents who are known to be heterozygotes (because of a previously affected child), the likelihood of recurrence is generally 25 per cent. Because these diseases cause severe mental retardation, most parents would not consider another pregnancy unless they could be assured that they would not have a defective child.

Those apparently normal parents who have 45 chromosomes, which includes a translocation of a No. 21 chromosome onto a 13 or 22 chromosome, have a greater than 10 per cent chance of having a mongoloid child.[4] This is clearly a high risk situation, tantamount to rubella infection in the first trimester. Most parents who have had a translocation Down's baby would prefer not to repeat the experience. The possibility of early detection of abnormal fetuses in such circumstances, with an option for abortion, will enable such parents to have only chromosomally normal offspring in the future.

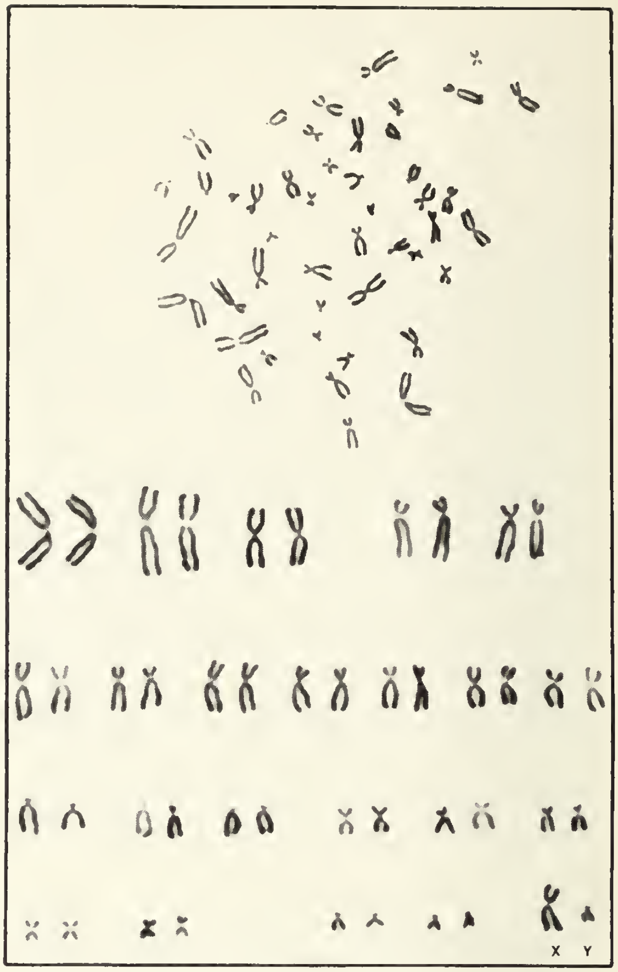


Fig. 2. Metaphase and karyotype of an amniotic fluid cell, obtained from a 16 week pregnant woman, 25 years of age. This patient had had a previous child with Down's syndrome, and on the basis of the normal karyotype of the amniotic fluid cells, a normal, male (XY) child was predicted. At 40 weeks of pregnancy, a normal baby boy was delivered.

It is well established that maternal age is an important factor in the incidence of trisomy diseases. Although we do not have good statistics for all of the trisomic conditions, those for mongolism are well established and may serve as a prototype.[5] As the maternal age increases from 18 to 45, the incidence of mongolism imcreases about 50-fold, from one mongoloid child in about 2300 live births to one in 46 births. Women over 40 have greater than a one per cent chance of having a child with mongolism. When the presence of a mongoloid in the family is combined with an advancing maternal age of greater than 35, the recurrence risk is also greater than one per cent.

The most rewarding, and the most frequent, diagnoses we make are those of normal fetuses

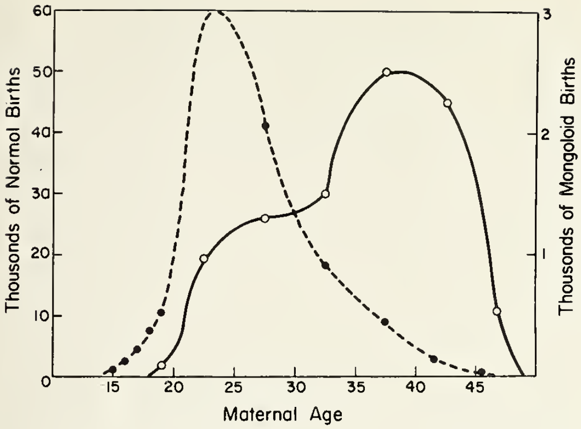


Fig. 3. The maternal ages of all births in Michigan in 1968 is given by the dotted line. For comparison, the maternal ages of 9,441 mongoloid births as tabulated by Penrose and Smith.[5]

in high risk pregnancies. The parents are spared considerable anxiety in the last two trimesters of pregnancy. On the other hand, when the diagnosis of a seriously defective fetus is made, the parents are faced with the question of therapeutic abortion. If they elect to abort the pregnancy, they must either show that continuation of the pregnancy would be harmful to the mother's physical health, in which case an abortion may be performed in Michigan; or they must leave the state and have the abortion performed elsewhere.

It is interesting to consider the possible impact of antenatal diagnosis on the population with respect to even one specific disease. For instance, one might ask what effect antenatal diagnosis would have on the incidence of mongolism in the State of Michigan if parents elected to undergo therapeutic abortions for all prenatally diagnosed cases of mongolism? In Michigan, approximately 160,000 infants are born each year. Since the incidence of mongolism is about 1/600, 256 infants with mongolism will be born in any given year. These infants will have an average I.Q. of about 40 and will require, at the minimum, special education for the trainable, and, more often, complete institutional care throughout most, if not all, of their lifetime. Approximately 10 per cent of all children in schools for the retarded are mongoloid. The state budget allocated for mental retardation in Michigan is over $80 million, and of this about 10 per cent is spent for the care of the persons with Down's syndrome. In addition, the cost to parents is high both financially and emotionally.

If the fetuses of all pregnant mothers were examined early in pregnancy, only wanted mongoloids would be born. This would mean that approximately 600 antenatal studies would be made for every mongoloid conception. However, because of the maternal age distribution of mongolism, it is possible to select a high risk population for study. The number of pregnant women over 40 years of age in any given year is about 2,900. If these 2,900 women had amniocentesis, approximately 58 mongoloid fetuses could be diagnosed. That is, by examining 1.8 per cent of all pregnant women, 23 per cent of all mongoloids could be detected. If all women over 35 years of age were examined, about 12,000 women or 8 per cent of all pregnant women would need amniocentesis. One hundred twenty mongoloids would then be diagnosed, which is 50 per cent of the mongoloids conceived during any given year.

The cost of performing such a large number of amniocenteses would be considerable. It now costs approximately $100 for each procedure. Therefore, in order to diagnose the mongoloids born to women over 40 in the State of Michigan, the cost would be about $300,000. This means that it would cost $5,000 for each positive diagnosis. The price of each diagnosis would thus be equal to the cost of 10 months of institutional care, the per diem rate in Michigan now being $16.45 per day.

The cost for all of this work is low in comparison with other screening procedures now routinely performed in the state. For instance, 160,000 diagnostic tests are done in this state each year in order to diagnose only eight infants affected with phenylketonuria. The total cost of this diagnostic program is about $700,000.

The future applications of early amniocentesis to preventative medicine will depend on the status of our abortion laws, and the extent to which the State commits itself to support diagnostic services. These are not simple issues and they demand the consideration of all concerned Michigan physicians.

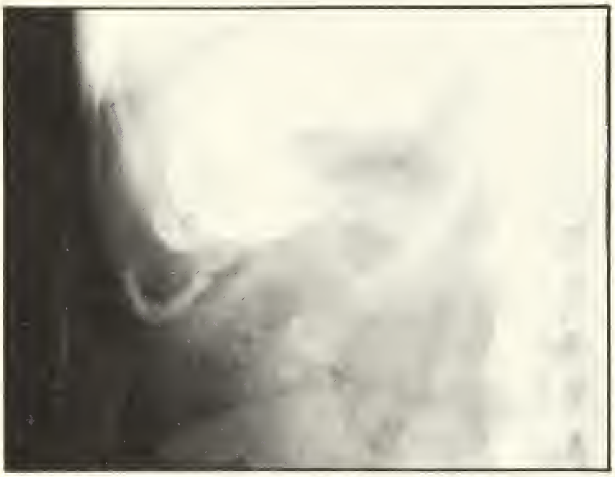
References

1. Steele, M. and Breg, R.: Chromosome analysis of human amniotic fluid cells. *Lancet, 1:* 383, 1966.
2. Nadler, H. and Gerbie, A.: Role of amniocentesis in the intrauterine detection of genetic disorders. *New Eng. J. Med., 282:* 596, 1970.
3. Milunsky, A., Littlefield, J., Kanfer, J., Kolodny, E., Shih, V., and Atkins, L.: Prenatal genetic diagnosis. *New Eng. J. Med., 283:* 1370, 1498, 1441 (3 parts), 1970.
4. Hamerton, J. C.: Robertsonian translocations in man: evidence for prezygotic selection. *Cytogenetics, 7:* 260-276, 1968.
5. Penrose, L. S. and Smith, G. F.: Down's anomaly. Boston, Little, Brown & Co., 1966, p. 150.

Doctors, expand your knowledge about radiology by studying this monthly column prepared by the chief radiologist at Detroit Memorial Hospital.

The Viewbox

By Raymond S. Kurtzman, MD
Detroit



Diagnosis

Porcelain gall bladder.

X-Ray Findings

There is diffuse calcification in the wall of the gall bladder.

Discussion

A calcified gall bladder wall, or porcelain gall bladder, is the result of chronic inflammation. It is almost invariably associated with an obstructed cystic duct, which prevents either orally or intravenously administered contrast agents from entering it. In spite of its relatively dramatic appearance, the lesion generally produces few if any symptoms.

Doctor Kurtzman is an associate scientific editor of **Michigan Medicine.**

Wurtsmith doctors successful in opening clinic for Indians

A regular series of clinics is serving the Chippewa Indians residing near Wurtsmith Air Force Base, Oscoda, following the plans of the young base doctors who have originated the clinics.

Dale Heisinger, MD, of Stockton, Calif., who has just ended his tour of duty at Wurtsmith, reported early in May that he and Thomas E. Hayhurst, MD, also a base physician, are optimistic that their Thursday evening clinics will be continued.

"We have approached other base physicians here and we think our project will continue to go even after we're gone," said Doctor Heisinger. Doctor Hayhurst is scheduled to complete his Wurtsmith tour of duty in August.

The two doctors, accompanied by several base nurses, started a weekly series of clinics in April, giving general physical examinations to approximately one third of the 65 Chippewas residing in Mikado and Hubbard Lake. In May, the clinics were switched to one every other week.

Doctor Heisinger reported plans then for the building of a new house in the Indian community which will contain a proper examining room. Until its completion sometime this month, the doctors have been using the community church.

"The leaders of the Indian community have been very appreciative of our work," said Doctor Heisinger. "The other residents are somewhat timid about coming to us. It will probably be a while yet before we establish real rapport and can deal with all the members of the community, but we think this will come."

The initial three-hour Thursday evening clinics were used to prepare medical records on the Indians examined, and to let the community know the doctors' services were available on a regular basis. Doctor Heisinger, a pediatrician, advised the mothers of well baby care and distributed forms to be used as immunization records.

Possible diagnoses of grand mal epilepsy, hypertension and diabetes were made in three of the adults seen, and arrangements were made to refer those persons to local physicians for proper treatment. The Indians cannot be hospitalized at the base, and Doctors Hayhurst and Heisinger also lack necessary laboratory facilities.

The two physicians conceived the idea of providing medical care to the local Indians, most of whom live at subsistence level and have not received adequate medical care.

Re-registration figures from State Board describe MD distribution

The following statistics are taken from the Michigan State Board of Registration in Medicine Report of 1971 Annual Re-Registrations, as of March 22, 1971. Statistics for every fifth year are printed to show changes. Copies of the yearly figures are available from MSMS.

County	1970 Population	1961	1966	1971
Alcona	6,943	0	0	1
Alger	8,370	4	5	6
Allegan	65,781	26	29	26
Alpena	30,373	28	28	26
Antrim	12,055	3	4	3
Arenac	10,570	0	2	4
Baraga	7,534	1	4	4
Barry	37,858	18	18	17
Bay	116,628	89	91	84
Benzie	8,356	2	3	3
Berrien	161,400	108	115	122
Branch	36,396	24	26	29
Calhoun	140,061	129	141	127
Cass	42,681	11	10	8
Charlevoix	16,131	9	12	8
Cheboygan	16,027	7	9	10
Chippewa	31,910	19	19	18
Clare	15,680	5	4	4
Clinton	48,555	16	15	10
Crawford	6,357	5	7	8
Delta	35,265	21	25	21
Dickinson	23,500	21	26	28
Eaton	68,352	22	22	19
Emmet	17,518	27	31	53
Genesee	441,666	309	344	341
Gladwin	12,747	5	6	4
Gogebic	20,116	16	13	13
Grand Traverse	38,359	77	72	95
Gratiot	38,731	22	22	29
Hillsdale	36,599	16	17	16
Houghton	34,233	23	20	29
Huron	33,418	18	21	19
Ingham	256,567	248	287	329
Ionia	45,632	25	22	22
Iosco	24,161	2	5	11
Iron	13,678	13	10	7
Isabella	43,769	26	27	29
Jackson	142,422	127	115	111
Kalamazoo	199,287	199	240	281
Kalkaska	5,726	1	3	4
Kent	408,234	427	464	495
Keweenaw	2,166	2	2	1
Lake	5,177	1	3	7
Lapeer	51,736	26	24	19
Leelanau	10,586	0	2	2
Lenawee	80,220	57	59	54
Livingston	58,666	22	25	25
Luce	6,693	14	17	9
Mackinac	9,501	8	5	5
Macomb	620,478	98	205	270
Manistee	19,788	14	15	17
Marquette	63,645	48	51	67
Mason	22,171	18	16	18
Mecosta	27,076	10	12	13
Menominee	23,974	16	13	12
Midland	63,003	42	59	73
Missaukee	7,001	3	2	3
Monroe	117,625	42	43	47
Montcalm	38,851	22	19	16
Montmorency	4,757	1	0	0
Muskegon	156,077	118	123	128
Newaygo	27,391	19	14	14
Oakland	900,691	486	872	1,293
Oceana	17,660	8	8	7
Ogemaw	11,153	6	8	5
Ontonagon	10,335	5	5	4
Osceola	14,673	5	3	5
Oscoda	4,468	1	1	5
Otsego	10,013	8	7	10
Ottawa	127,468	61	74	85
Presque Isle	12,486	1	1	3
Roscommon	8,944	4	6	7
Saginaw	217,787	153	171	185
Sanilac	34,505	16	16	17
Schoolcraft	8,092	4	5	5
Shiawassee	62,957	33	27	31
St. Clair	118,776	69	82	87
St. Joseph	46,713	35	31	31
Tuscola	48,285	18	19	20
Van Buren	55,182	29	32	30
Washtenaw	230,128	591	729	944
Wayne	2,642,348	3,155	3,151	2,815
Wexford	19,295	13	16	21
SUB TOTAL		7,431	8,307	8,884
OUT OF STATE		1,185	2,514	3,394
TOTALS		8,616	10,821	12,815
MILITARY (Exempt)			471	537
FOREIGN (Missionaries, Peace Corps, Etc.)				106
GRAND TOTAL		8,616	11,292	12,921

* * *

Following are the totals for the past 10 years:

1961	8,616	1967	11,584
1962	10,133	1968	11,830
1963	10,237	1969	12,297
1964	10,735	1970	12,489
1965	11,025	1971	12,921
1966	11,292		

Head and neck metastases from renal carcinomas

By Roger Boles, MD
Joseph Cerny, MD
Ann Arbor

What seemed to be more than an infrequent occurrence of head and neck metastases from carcinoma of kidneys prompted this review of all the cases of renal carcinoma seen at the University of Michigan Hospital between 1958 and 1964.

105 cases of carcinoma of the kidney were seen during these six years; of these 105 cases, 16 (15.2%) were found to have metastases to the head and neck region and in eight of these cases (7.6%), the head and neck metastases accounted for the presenting complaint. (**Table 1, 2**)

In all eight of these latter cases, the primary renal lesions were not suspected until the metastatic lesions in the head and neck were biopsied and read histologically as metastatic carcinoma from the kidney. In addition to the 16 cases with head and neck metastases, three more patients had unbiopsied head and neck lesions which were presumed to be metastases from the primary renal carcinoma. Still another patient was found to have a microscopic metastasis in the thyroid gland at autopsy which had not been clinically suspected ante mortem.

These are certainly not overwhelming percentages; but they do serve to remind those dealing with head and neck lesions that the kidney is worthy of investigation when one is confronted with an apparent metastasis to the head and neck for which no local primary lesion can be found. Bernstein, et al,[1] in a recent review of the world

Table I

Eight Patients in whom Biopsy of Presenting Head and Neck Metastases Led to Diagnosis of Renal Cell Carcinoma

Pt.	Sex	Age	Head and Neck Site	Symptoms and Signs	Other Metastases		Renal Vein Involvement		
					Yes	No	Yes	No	Unknown
M.A.	M.	55	Tip of nose	Massive bleeding	X				X
C.C.	M.	73	Suprascapular node	Painless mass, weight loss	X		X		
M.J.	F.	42	Occipital subcutaneous nodule	Painless nodule	X		X		
J.N.	M.	80	Right neck mass	Painless mass		X			X
W.H.	M.	53	Mass left mandible	Painless mass	X		X		
V.B.	F.	47	Supra-clavicular nodes	Painless mass, weight loss	X				X
L.H.	M.	66	Larynx Neck nodes Mass left cheek	Hoarseness painless masses	X			X	
M.S.	F.	68	Left parietal lobe	Neurological symptoms	X				X

The authors are with the Department of Otorhinolaryngology and the Section of Urology, Department of Surgery, University of Michigan.

Table II

Eight Patients with Late Head and Neck Metastases

Pt.	Sex	Age	Head and Neck Site	Symptoms and Signs	Other Metastases Yes	Other Metastases No	Renal Vein Involvement Yes	Renal Vein Involvement No	Renal Vein Involvement Unknown
G.V.	M.	62	Ethmoid-sinuses	Epistaxis	X				X
M.T.	M.	71	Thyroid gland	Painless Mass	X				X
L.J.	M.	46	Frontal Bones	Painless	X				X
M.S.	M.	45	Cervical Lymph nodes	Painless Mass	X		X		
M.B.	F.	62	Brain	Paresis cranial nerves V, VI, VII, VIII	X		X		
D.G.	M.	68	Scalp, skull Clavical	Headaches, painless masses	X		X		
M.K.	M.	60	Cervical spine	Neck pain	X				X
A.B.			Cervical lymph node	Painless Mass	X		X		

literature on metastatic tumors of the nose and paranasal sinuses, reported that hypernephroma is by far the most common tumor which metastasizes to the paranasal sinuses and that these metastases may appear years after resection of the primary renal tumor. They also mention that epistaxis was the chief presenting complaint in over 70 percent of these cases; whereas epistaxis did not seem to occur so frequently with metastases from other primary sites, such as the breast, G.I. tract, etc. Their experiences certainly seem to agree with our own, as well as with those of other authors on this subject.[2,3,4,5]

Although our review was directed primarily toward the head and neck metastases, multiple and widely distributed metastases were the rule, with pulmonary metastases being the most common. **(Table 3)** Hematuria was also confirmed as by far the most common presenting complaint or abnormality in carcinomas of the kidney.

That renal carcinomas apparently bypass the fine pulmonary "filter bed" to metastasize to the head and neck is probably best explained by the rich venous anastomoses and plexuses of the vertebral and epidural systems. **(Figure 1)** These are veins without valves which should offer little resistance to the propagation of tumor emboli toward the head and neck with recumbency and with efforts which increase intra-abdominal and intra-thoracic pressures. Batson[6] rather classically described this venous system and its potential for

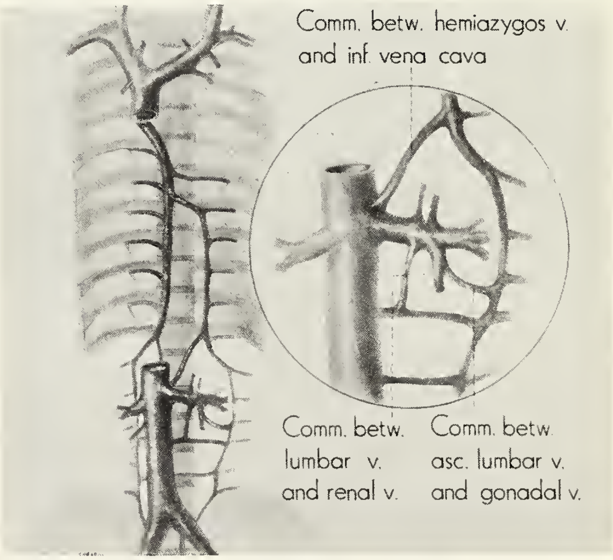

Comm. betw. hemiazygos v. and inf. vena cava
Comm. betw. lumbar v. and renal v.
Comm. betw. asc. lumbar v. and gonadal v.

Fig. 1. Venous anastamoses between the kidney and urogenital ridge and Batson's vertebral venous plexus which bypasses the caval, portal, and pulmonary venous systems.

Table III

Distribution of Metastases in 105 Patients With Renal Cell Carcinoma

Location	Number of Patients
Lungs	43
Liver	18
Head and Neck	16 (plus 4)*
Spine	15
Long bones	14
Pelvis	7
Ribs	7
Adrenal	4
Mediastinum	4
Skin	4
Heart	2
Peritoneum, omentum Colon, Vagina, Bowel	1 each

---

*Plus 3 patients in whom head and neck metastases were almost certainly present, but not histologically proven; and one patient with metastases found at autopsy.

promoting metastases from renal, urogenital ridge, breast and bronchogenic primary carcinomas.

Summary

105 cases of carcinoma of the kidney were reviewed over a six year period with the finding of 16 cases (over 15%) with head and neck metastases. Eight of these cases actually developed their initial symptoms as a result of the head and neck metastases, and the diagnosis of the renal primary carcinoma made by biopsy and the histological appearance of these head and neck metastases. Three additional cases had unproven but presumptive metastases to the head and neck, and still another case revealed a microscopic metastasis to the thyroid gland at autopsy which had been undetected clinically ante mortem. These relatively frequent head and neck metastases from renal carcinomas may result from tumor embolization via Batson's vertebral venous plexus which bypasses the cardiopulmonary vascular bed.

Bibliography

1. Bernstein, J.M., Montgomery, W.M., & Balogh, K., Jr.: *Metastatic Tumors to the Maxilla, Nose, & Paranasal Sinuses.* Laryngoscope, Vol. 76, No. 4, pp 621-50, April 1966.
2. Maxwell, J. H.: *Metastatic Hypernephroma of the Larnyx—Report of Two Cases.* Michigan, University Hospital Bulletin, Vol. 8, April 1942.
3. Quinn, F.B. & McCabe, B.F.: *Laryngeal Metastases from Malignant Tumors in Distant Organs,* Annals Otol., Rhinol. & Laryn., Vol. 66, March 1957.
4. Meyer, I. & Shklar, G.: *Malignant Tumors Metastatic to the Mouth & Jaws.* Oral. Surg., Oral Med., & Oral Path., Vol. 20, No. 3, pp 350-62, Sept. 1965.
5. Cash, C.D., Royer, R.Q. & Dahlin, D.C.: *Metastatic Tumors of the Jaws.* Oral Surg., Oral Med., & Oral Path., Vol. 14, pp 897-905, 1961.
6. Batson, O.V.: *The Function of the Vertebral Veins & Their Role in The Spread of Metastases.* Annals of Surg., Vol. 112, July 1940.

Your opinion please

"Are the increases in the cost of health care traceable to correctable inefficiencies in the present methods of financing and delivery? If so, what should be done by government and/or private industry to induce reforms?"

John O. Goodsell, MD
Saginaw

Over the past 10 years especially, hospital emergency rooms have assumed the proportions of outpatient clinics. This appears to me to be an irreversible trend, and in fact will probably expand at the same rate that it is envisioned that the population explosion will occur. Most hospital emergency rooms are ill-equipped to function as out-patient clinics.

It therefore seems logical to me that everybody associated with the delivery of health care should recognize this development and co-operatively establish facilities for adequate out-patient service at all general hospitals. This, of course, implies a form of group practice, whatever form it may take at each hospital, but seems the only sensible way to handle the huge expansion of hospital outpatient services.

All of my 17 years in private practice have been mainly as a solo practitioner in a private office, with 10 years initially in a two-man partnership. This may be a certain satisfaction from the standpoint of rugged individualism, but really is a terribly inefficient way to practice.

J. Robert Franck, MD
Wakefield

Strict adherence to the terminology of the proposition under consideration must elicit a qualified affirmative answer. We must recognize that we are discussing total health care costs, of which medical services are only a small fraction.

Unfortunately, the concept of highest efficiency in health care brings to mind a picture far removed from the practice of the art of medicine. Can the production line approach, so successful for General Motors, really satisfy all of the medical needs of the patient?

The cost of bureaucratic administration, supervision and general kibitzing is not publicized, but must be tremendous. The federal government must be willing to honestly attack the problems of inflation with its pyramiding of price increases, including those affecting health care. Washington must exercise restraint in introducing new medical programs into an already over-heated health care system.

Government and our educational institutions must cooperatively reassess the curricula of our medical schools to increase the supply of frontline practitioners, and stem the rising costs of medical education.

A national approach for relief from the malpractice monster would mitigate the practice of defensive medicine with its increased costs.

Commercial insurers must liberalize the scope of out-patient coverage to decrease avoidable hospitalization. Attorney-dominated legislatures are not apt to correct it.

The medical profession has an obligation to take firm, prompt action against the greedy few who sully the image of all. Reasonable peer review can hardly be opposed by thinking men. Will it be our plan or theirs?

Needless duplication of health facilities can not be tolerated. A recent release indicated the cost of new hospital capacity in the metropolitan areas at $50,000 per bed, with yearly maintenance of $25,000, and $17,000 even if unoccupied.

Mark C. Levine, MD
Flint

The medical profession has been accused of deliberately creating, or dragging its feet in correcting, inefficiencies in present methods of financing and delivering health care.

As a matter of fact, I think that this is no longer true, and that most of the problems at this time, for which corrective measures would be possible, would require reforms not by medicine, but by government and/or private industry.

In the first place, there has been a tendency by both federal and state governments to equate cults and quackery with medical care rendered by accredited professionals. Thus, chiropractors have been permitted to qualify for Medicaid, as well as Blue Shield money, in spite of numerous studies demonstrating the lack of validity to their theory of healing. Obviously, money spent for services by chiropractors is wasted, and for this government must take full responsibility—not the medical profession, which has always opposed quackery.

Another example is the denial of extended care benefits for Medicare patients, thus forcing physicians to keep their Medicare patients longer in much more expensive acute care facilities, so that they will receive optimal care. Further, if the patient or the physician protests the denial of such benefits, the appeals mechanism requires extra paper work, and physician time, to assist the patient in securing benefits to which he was supposed to have been entitled under the original Medicare law.

By permitting private industry to make arbitrary decisions, ignoring utilization committees or the recommendations of physicians directly concerned with the management of the patient, private industry also must take its share of the blame in maintaining higher medical costs in this area.

The unnecessarily long and endless duplicating

(Continued on Page 678)

---

valid conclusions could be drawn from the report. This was, of course, very conveniently ignored by those individuals who wished to use some of the statistics for their own pet objectives.

* * *

Should I discuss the health care promises made to the public by the governmental officials, promises which reached the pie in the sky stage in some cases?

Should I discuss the unwillingness of the same governmental officials to produce the money necessary to implement their promises, some of which they have already enacted into law. An example of the latter is the promises of Medicaid with the cold hard fact that when it was necessary to produce the money none was forthcoming?

* * *

The more I thought of this editorial the more I felt that an enumeration of a few of the problems facing medicine would be the better approach. These and a host of other problems facing the medical profession in these United States.

We, in medicine, must accept the fact that changes will occur. Our function is to see to it that those changes which do occur are changes for the better. We must not allow change for the sake of change. We must continue to have a very strong voice in the future delivery of health care and a paramount voice in the delivery of medical care; we are the experts in the latter.

Let your elected delegates to the coming session of the MSMS House of Delegates, October 3-4-5, know your wishes, thoughts and suggestions. They are your representatives and speak as your voice.

Please remember that, in today's political climate, changes in the delivery of medical care will occur; the pressures for this are too great. Let us not deny this statement.

Let us, however, directly and through our elected representatives make certain that the public will always have a choice as to the type of medical care they desire and not be frozen into a single plan as has occurred in England and in our neighbor, the Province of Ontario.

Edward J. Tallant, MD
Detroit

CAMPBELL'S SOUPS IN DIABETIC DIETS*

RECOMMENDATIONS FOR PLACING CAMPBELL'S SOUPS* INTO EXCHANGE LISTS

* These recommendations are based on a *one cup portion* when prepared according to directions on the label. If milk is used in the preparation, use part of your daily requirement.

Exchange Substitution for 1 Bread and ½ Fat
Tomato
Tomato, Bisque of
Tomato Rice, Old Fashioned

Exchange Substitution for ½ Bread and ½ Fat
Asparagus, Cream of

Exchange Substitution for 1 Meat and 1½ Bread
Hot Dog Bean
Split Pea with Ham

Exchange Substitution for ¼ Meat and ½ Bread
Chicken Gumbo
Chicken Noodle

Campbell's Soups are appetizing and enjoyable and, because of the many varieties available, offer your diabetic patients the opportunity to plan and enjoy more interesting and appealing meals.

*To obtain copies of "Recommendations for Placing Campbell's Soups Into Exchange Lists," suitable for distribution to patients, write to Campbell Soup Company, Dept. 500, Campbell Place, Camden, N.J. 08101.

here's a soup
for almost every patient and diet
.for every meal
and, it's made by Campbell

An excerpt from the Searle series "The Ecology of Birth Control"*

The Unwanted Child & Birth Control

Ten thousand battered children–a growing medical problem?

In his daily practice the physician witnesses the human suffering caused by uncontrolled fertility. Perhaps one of its most tragic effects is the unwanted child, who so often experiences parental rejection. The rejected child in a family may be neglected, nagged and severely punished. Sometimes he is criminally abused. Child abuse is common enough to have become a separate clinical entity: the "battered child" syndrome. Reliable statistics are difficult to obtain, but it has been estimated that in this country alone roughly 10,000 children are "battered" per year, and their number may be increasing.

A revealing picture of child abuse patterns is provided by one study of the American Humane Society. More than half of the 662 children involved (all reported in newspapers within a single year) were less than 4 years of age. One fourth of the battered youngsters died; most of these deaths were of children less than 2 years of age. Fathers were more often guilty of child abuse than mothers, but sometimes both parents participated. The study indicated that battered children are not limited to any particular socioeconomic stratum.

***For the complete brochure, and others in the serie as they appear, please write to Searle or ask your Searle representative.** Explored in the forthcoming issues will be the history of birth control, the influenc of poverty, ethnic factors and marital status, its role in illness, its genetic implications and its effects on the emotional and behavioral life of the individual.

Original contributions to the science of contraception

BOTH AVAILABLE IN 21- AND 28-PILL SCHEDULES

Ovulen® · Demulen®

Each white tablet contains: ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Each white tablet contains: ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Demulen . . . for its low estrogen and Searle's progestin—or Ovulen . . . with its wide physician and patient acceptance. Both offer almost complete contraceptive effectiveness and a low incidence of side effects. Both with a choice of pill-taking schedules . . . simple "Sunday-starting" and patient-proof Compack® tablet dispensers.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration, and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969.

1A5

SEARLE Where "The Pill" Began
G. D. Searle & Co., P.O. Box 5110, Chicago, Illinois 60680

Mylanta®
24 million hours a day.

Through the day, every day,
ulcer patients take
one million doses of Mylanta
for relief of ulcer pain.

Mylanta®
LIQUID/TABLETS
aluminum and magnesium hydroxides plus simethicone

Good taste = patient acceptance
Relieves G.I. gas distress*
Non-constipating

*with the defoaming action of simethicone

Stuart PHARMACEUTICALS Pasadena, Calif. 91109
Division of Atlas Chemical Industries, Inc., Wilmington, Del. 19899

Michigan Mediscene

July 10-11—Summer Educational Seminar, Michigan State Medical Assistants Society, Boyne Mountain Lodge, contact: Mrs. Dessie Farwell, 115 Howard St., Kalamazoo

July 22-23—State Comprehensive Health Planning Advisory Council, Kellogg Center, East Lansing, contact: Michael Meigher, acting director, Executive Office, The Capitol Building, Lansing

July 29-30—51st annual Coller-Penberthy-Thirlby Medical Conference, Park Place Motor Inn, Traverse City, contact: James W. Hall, MD, arrangements chairman, Beaumont Building, 1109 Sixth St., Traverse City, 49684

July 30—Annual midsummer meeting of The MSMS Council, Boyne Highlands, contact: Warren F. Tryloff, MSMS director, MSMS headquarters

Sept. 16-18—Michigan regional meeting of the American College of Physicians, in conjunction with the Michigan Society of Internal Medicine, Sheraton-Cadillac Hotel, Detroit, contact: Muir Clapper, MD, ACP Governor for Michigan, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Sept. 25-26—Fall educational seminar and board meeting, Michigan State Medical Assistants Society, Holiday Inn, St. Joseph, contact: Claire Van Dam, 1850 Colfax at Lomar, Benton Harbor, 49022

Oct. 1—Michigan Hospital Association House of Delegates meeting, Park Place Motor Inn, Traverse City, contact: H. Allan Barth, executive director, MHA, 2213 E. Grand River Ave., Lansing, 48912

Oct. 3 and 6—MSMS Council, Pantlind Hotel, Grand Rapids, contact: Warren F. Tryloff, MSMS director, MSMS headquarters

Oct. 3-7—1971 MSMS Annual House of Delegates meeting and Scientific Sessions, Civic Auditorium, Grand Rapids

Oct. 4-6—1971 Annual Convention of the Woman's Auxiliary to MSMS, Pantlind Hotel, Grand Rapids

Oct. 11—Departure day for 14-day MSMS Orient Adventure; contact: Miss Helen Schulte, MSMS Headquarters

Oct. 20—Woman's Auxiliary to MSMS District IV Meeting, Holland

Oct. 20-21—Michigan TB and Respiratory Disease Association Education Meeting, Kellogg Center, East Lansing, contact: Les Harcus, Public Relations, Michigan TBRDA, 403 Seymour, Lansing

Oct. 21—Woman's Auxiliary to MSMS District III Meeting, Allegan

Oct. 25-29—Michigan Nurses Association Convention, Pantlind Hotel, Grand Rapids, contact: William E. Ludwig, public relations director, MNA, 120 Sparton Ave., East Lansing, 48823

Oct. 26—Woman's Auxiliary to MSMS District II Meeting, Adrian

Oct. 27—Woman's Auxiliary to MSMS District I Meeting, Pontiac

Oct. 28—Woman's Auxiliary to MSMS District V Meeting, Flint

Nov. 10—MSMS Council, MSMS Headquarters, East Lansing, noon to 5 p.m., contact: Warren F. Tryloff, MSMS director, MSMS headquarters

Nov. 28-Dec. 10—Many Michigan physicians will be attending the AMA Clinical Convention in New Orleans

Dec. 8—MSMS Council, MSMS Headquarters, East Lansing, 9:30 a.m., contact: Warren F. Tryloff, MSMS director

Dec. 8—11th annual Thyroid Workshop, sponsored by Thyroid Service of Wayne State University School of Medicine, Wayne County Medical Society Auditorium, Detroit, contact: Ali Abbasi, MD, Publicity Committee, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Jan. 25, 1972—Woman's Auxiliary to MSMS Executive Committee Meeting, MSMS Building (State Officers, Committee Chairmen, District Directors, County Presidents)

Jan. 29-30—Educational seminar and board meeting, Michigan State Medical Assistants Society, Holiday Inn, Battle Creek, contact: Patricia Voke, 196 S. Woodrow Ave., Battle Creek, 49015

March 26—Board meeting, Michigan State Medical Assistants Society, noon, MSMS Headquarters

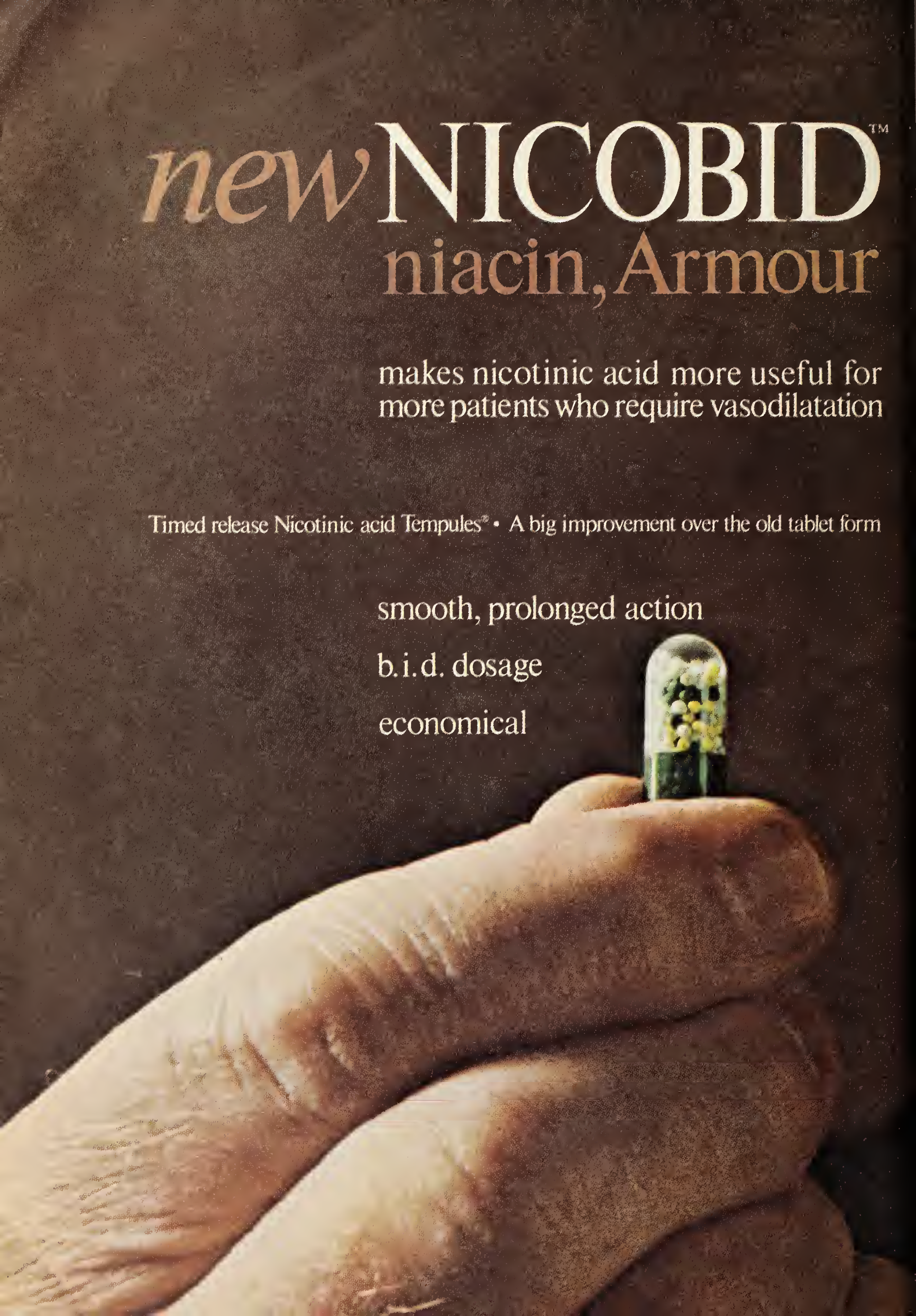
April 19—Woman's Auxiliary to MSMS Legislative Day—Olds Plaza, Lansing

April 19-20—Woman's Auxiliary to MSMS Spring Conference (following Legislative Day), Hospitality Inn, East Lansing

April 27-30—Annual Convention, Michigan State Medical Assistants Society, Holiday Inn, Crosstown Parkway, Kalamazoo, contact: Mrs. Betty Boers, 1116 Sheridan, Kalamazoo, 49001

Horizons Unlimited

MSMS members may obtain copies of the AMA "Horizons Unlimited" career handbook with an eight-page Michigan insert by writing to MSMS, P.O. Box 152, East Lansing 48823.

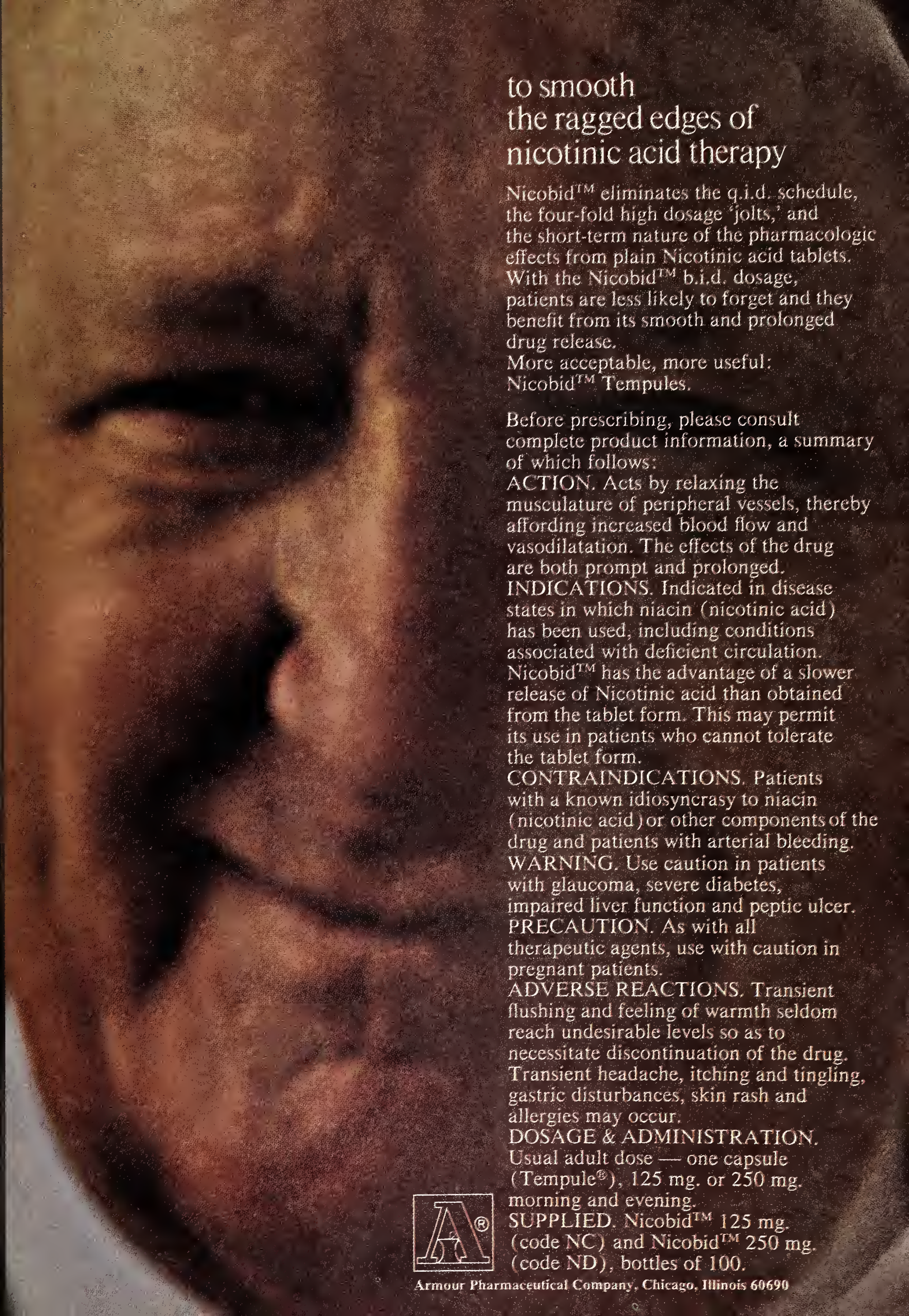


new NICOBID™
niacin, Armour

makes nicotinic acid more useful for more patients who require vasodilatation

Timed release Nicotinic acid Tempules® • A big improvement over the old tablet form

- smooth, prolonged action
- b.i.d. dosage
- economical



to smooth the ragged edges of nicotinic acid therapy

Nicobid™ eliminates the q.i.d. schedule, the four-fold high dosage 'jolts,' and the short-term nature of the pharmacologic effects from plain Nicotinic acid tablets. With the Nicobid™ b.i.d. dosage, patients are less likely to forget and they benefit from its smooth and prolonged drug release.
More acceptable, more useful: Nicobid™ Tempules.

Before prescribing, please consult complete product information, a summary of which follows:
ACTION. Acts by relaxing the musculature of peripheral vessels, thereby affording increased blood flow and vasodilatation. The effects of the drug are both prompt and prolonged.
INDICATIONS. Indicated in disease states in which niacin (nicotinic acid) has been used, including conditions associated with deficient circulation. Nicobid™ has the advantage of a slower release of Nicotinic acid than obtained from the tablet form. This may permit its use in patients who cannot tolerate the tablet form.
CONTRAINDICATIONS. Patients with a known idiosyncrasy to niacin (nicotinic acid) or other components of the drug and patients with arterial bleeding.
WARNING. Use caution in patients with glaucoma, severe diabetes, impaired liver function and peptic ulcer.
PRECAUTION. As with all therapeutic agents, use with caution in pregnant patients.
ADVERSE REACTIONS. Transient flushing and feeling of warmth seldom reach undesirable levels so as to necessitate discontinuation of the drug. Transient headache, itching and tingling, gastric disturbances, skin rash and allergies may occur.
DOSAGE & ADMINISTRATION. Usual adult dose — one capsule (Tempule®), 125 mg. or 250 mg. morning and evening.
SUPPLIED. Nicobid™ 125 mg. (code NC) and Nicobid™ 250 mg. (code ND), bottles of 100.

Armour Pharmaceutical Company, Chicago, Illinois 60690

RN's duties in determination of death described by Attorney General

The following article is printed here at the request of Constance C. Lucia, RN, consultant in nursing practice to the Michigan State Board of Nursing. The article's pronouncements on the jurisdiction of nurses in the establishment of death were made March 31 in a letter from Michigan Attorney General Frank J. Kelley, to Alice Dorian, RN, administrative secretary of the Board of Nursing.

Dear Ms. Dorian:

In your request for an opinion on pronouncement of death you ask whether a registered nurse or licensed practical nurse may pronounce a patient dead or effect the transfer of an apparently deceased patient from the hospital unit to the hospital morgue without the attendance of a licensed physician to verify the fact of the patient's death.

You further requested an interpretation of 1967 PA 149, known as the nursing practice act [MCLA 338.1151; MSA 14.694 (1)], to determine if a registered nurse or licensed practical nurse can make a judgment of the fact of death without violating 1899 PA 237, as amended, known as the medical practice act [MCLA 338.51; MSA 14.531].

The pertinent section of the nursing practice act is section 2 (b) which provides:

> "'Practice of nursing' means performance of the functions of a registered professional nurse, licensed practical nurse, licensed psychiatric attendant nurse or trained attendant. The practice of nursing *does not include acts of medical diagnosis* or the prescribing of a medical remedy, treatment or medication...." (emphasis added)

The relevant section of the medical practice act is section 9, which states in part:

> ". . . In this act, unless otherwise provided, the term *'practice of medicine'* shall mean the actual *diagnosing,* curing or relieving in any degree, or professing or *attempting to diagnose,* treat, cure, or relieve any human disease, ailment, defect or complaint, whether of physical or mental origin, by attendance or by advice, or by prescribing or furnishing any drug, medicine, appliance, manipulation or method, or by any therapeutic agent whatsoever." (emphasis added)

As can be seen from reading the above sections together, the process of diagnosing is an act of medical practice and is an act specifically excluded from the practice of nursing.

In *Greener* v *E. I. DuPont De Nemours & Co,* 188 Tenn 303, 308 (1948), the court held:

> ". . . 'diagnosis' is a physician's 'conclusion as to existence or identity of disease, drawn from the observable symptoms' . . . ." 12 Words and Phrases

The New York court stated in *People* v *Zinke,* 7 NYS2d 941, 947 (1938), in defining their practice of medicine statute:

> ". . . The term 'diagnosis' is derived from the Greek prefix 'dia' meaning between, and 'gignoskein' meaning to discern. It is, in modern terminology, a 'sizing up' or a comprehending of the physical or mental status of a patient. *It is the conclusion itself rather than the procedures upon which the conclusion is based which constitutes a diagnosis per se. . . .*" (emphasis added)

A registered nurse or licensed practical nurse can provide a physician with data such as pulse rate, blood pressure, etc. However, the ultimate diagnosis of the presence of life or death is a medical act and prohibited to those not being a licensed physician. In view of the above, a registered nurse or licensed practical nurse is not competent to make a pronouncement of death or order removal of the apparently dead body without violating the medical practice act and the nursing practice act in their present form.

MD Placement Notice

- Looking for a smaller town that needs and wants a physician?
- Do you need an associate or assistant in your practice?
- Are there towns in your area in need of additional physicians?
- If your answer is YES to any of the above questions, contact

Michigan Health Council
John A. Doherty, Executive Secretary
712 Abbott Rd., P.O. Box 431
East Lansing (Phone: 337-1615)
(No charge for this service)

The causes of vaginitis are multiple

Trichomonads . . . monilia . . . bacteria
You can depend on AVC—comprehensive therapy that combats all three major vaginal pathogens, alone or in combination.

AVC
Cream (aminacrine hydrochloride 0.2%, sulfanilamide 15.0%, allantoin 2.0%)

Suppositories (aminacrine hydrochloride 0.014 Gm., sulfanilamide 1.05 Gm., allantoin 0.14 Gm.)

Contraindications: Known sensitivity to sulfonamides.
Precautions/Adverse Reactions: The usual precautions for topical and systemic sulfonamides should be observed because of the possibility of absorption. Burning, increased local discomfort, skin rash, urticaria or other manifestations of sulfonamide toxicity are reasons to discontinue treatment.
Dosage: One applicatorful or one suppository intravaginally once or twice daily.
Supplied: Cream—Four-ounce tube with or without applicator. Suppositories—Box of 12 with applicator.

TRADEMARK: AVC AV-104 2/71 Y-149

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

AVC
The treatment is singular

A
BUILDING BLOCK
TO RECOVERY

"Welcome back, Ann"
As adjunctive therapy
DOUBLE STRENGTH
Orenzyme®
Bitabs One tablet q.i.d.
Trypsin 100 000 N.F. Units, Chymotrypsin: 8,000 N.F. Units; equivalent in tryptic activity to 40 mg. of N.F. trypsin
Reduces swelling
Hastens healing
Speeds recovery
trauma
One tablet q.i.d.

Indications: When used as adjunctive therapy for the rapid resolution of inflammation and edema, good results have been obtained in:
☐ Accidental Trauma ☐ Postoperative Tissue Reactions.
Other conventional measures of treatment should be used as indicated. In infection, appropriate anti-infective therapy should be given.
Contraindications: ORENZYME BITABS should not be given to patients with a known sensitivity to trypsin or chymotrypsin.
Precautions: It should be used with caution in patients with abnormality of the blood clotting mechanism such as hemophilia, or with severe hepatic or renal disease. Safe use in pregnancy has not been established.
Adverse Reactions: Adverse reactions with ORENZYME have been reported infrequently. Reports include allergic manifestations (rash, urticaria, itching), gastrointestinal upset and increased speed of dissolution of animal-origin surgical sutures. There have been isolated reports of anaphylactic shock, albuminuria and hematuria. Increased tendency to bleed has also been reported but, in controlled studies, it has been seen with equal incidence in placebo-treated groups. (See Precautions.) It is recommended that if side effects occur medication be discontinued.
Dosage: One tablet q.i.d.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144
TRADEMARK BITABS U S PATENT NO 3,004 893 9/70 0-009A 161

Orenzyme® Bitabs

Trypsin: 100,000 N.F. Units, Chymotrypsin: 8,000 N.F. Units; equivalent in tryptic activity to 40 mg. of N.F. trypsin

This "case history" runs to some 10,000 pages

This is a typical "case history" of one new drug—or, rather, a proposed new drug—assembled for submission to the U.S. Federal Food and Drug Administration. These volumes are the result of several years' work by thousands of professional and skilled personnel in just one pharmaceutical company's research laboratories, and by hundreds of physicians in medical schools, hospitals, and private practice. They cover every aspect of experience with this proposed new agent from chemical laboratory to clinic, from mouse to man. Each volume could conceivably represent hundreds of thousands of dollars of financial investment, countless hours of human effort. This veritable mountain of data stands behind every new agent offered to you by pharmaceutical manufacturers—a reassuring testimonial to the efficacy, safety and purity of the drugs you will prescribe today to lower the cost of disease to your patients.

Pharmaceutical Manufacturers Association
Pharmaceutical Advertising Council
1155 Fifteenth St., N. W., Washington, D.C. 20005

This message is brought to you as a courtesy of this publication on behalf of the producers of prescription drugs.

in stable adult diabetes, if diet alone fails...

start with DBI®-TD (phenformin HCl)

timed-disintegration capsules 50 mg.

A Distinctive Oral Hypoglycemic

---

a biguanide... not a sulfonylurea

Lowers elevated blood sugar without increasing endogenous insulin secretion.

Probably, secondary to its hypoglycemic effect, decreases insulin oversecretion. This may help to reduce lipogenesis and facilitate lipolysis, which may account for the clinically reported loss of excess body weight and lowering of elevated serum cholesterol levels in overweight, hypercholesteremic, stable adult diabetics unresponsive to diet alone.

DBI®-TD
(phenformin HCl)

timed-disintegration capsules 50 mg.

lowers elevated blood sugar

How to prescribe DBI®-TD (phenformin HCl)

To start with DBI-TD

Week 1 1 capsule with breakfast may be effective, or a second capsule may be given with the evening meal.

Week 2 Continue effective DBI-TD dosage.

If necessary, add an additional capsule to the A.M. or P.M. dose.

Thereafter Continue effective DBI-TD dosage.

To transfer from sulfonylurea therapy to DBI-TD alone: The first week, withdraw sulfonylurea; start with DBI-TD as indicated in the chart.

To transfer from sulfonylurea therapy to combined therapy with DBI-TD: The first week, continue dosage of sulfonylurea; add DBI-TD as indicated in the chart. When effective regulation of diabetes is attained, sulfonylurea may be reduced and/or withdrawn.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary. **Contraindications:** Diabetes mellitus that can be regulated by diet alone; juvenile diabetes that is uncomplicated and well regulated on insulin; acute complications of diabetes (metabolic acidosis, coma, infection, gangrene); surgery; severe hepatic disease; renal disease with uremia; cardiovascular collapse, after disease states associated with hypoxemia. **Warning:** Use during pregnancy is to be avoided. Until adequate data on the effects of DBI on the human fetus are available, such use can be considered experimental. **Precautions: Starvation Ketosis,** which must be differentiated from "insulin lack" ketosis, and is characterized by ketonuria in spite of relatively normal blood and urine sugar, may result from excessive DBI therapy, excessive insulin reduction or insufficient carbohydrate intake. Adjustment of DBI-TD or insulin dosage, or supplying carbohydrates, alleviates this state. DO NOT GIVE INSULIN WITHOUT FIRST CHECKING BLOOD AND URINE SUGARS. **Lactic Acidosis:** DBI is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, it is recommended that periodic determinations of ketones in the blood and urine be made in diabetics previously stabilized on DBI, or DBI and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH and the lactate-pyruvate ratio. DBI should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis. **Hypoglycemia:** Although hypoglycemic reactions are rare when DBI is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with DBI. **Adverse Reactions:** Principally gastrointestinal, occurring more often at higher dosage levels; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, DBI should be immediately withdrawn. Although rare, urticaria and gastrointestinal symptoms following excessive alcohol intake have been reported. **Dosage:** 1 to 3 DBI-TD 50 mg. capsules daily. **FSN 6505-724-6331.** **Also Available:** DBI tablets 25 mg. **Supplied:** Bottles of 100 and 1000.

USV PHARMACEUTICAL CORP., Tuckahoe, N.Y. 10707 USV

INSOMNIA
SEDATE EFFECTIVELY

With QUĪ-A-ZONE – you can sedate effectively. A balanced combination of short, intermediate, and long-acting barbiturates (totaling 100 mg.) in a rapidly disintegrating tablet – sedation is provided within a few minutes . . . followed by sound restful sleep . . . usually without morning hangover. The four barbiturates in QUĪ-A-ZONE have dual channels of elimination (renal and hepatic) to lessen metabolic burden, decrease barbiturate retention, and minimize depression.

QUĪ-A-ZONE™

Each rapidly-disintegrating tablet contains 25 mg. secobarbital, 25 mg. pentobarbital, 25 mg. butabarbital, and 25 mg. phenobarbital. Bottles of 100.
Usual Adult Dose: 1 to 2 tablets before retiring.
PRECAUTION: Should not be administered to patients sensitive to barbiturates, or in cases of known previous addiction. Warning: May be habit forming.

W-C PRECISION PHARMACEUTICALS

SEND FOR SAMPLES.
WALKER, CORP & CO., INC.
Syracuse, New York 13201

New Members

Ahmad N. Azar, MD, 20340 Harper, Detroit 48225

Lourdes V. Andaya, MD, Harper Hospital, Detroit 48201

Oliver A. Beamon, MD, 701 N. Logan #510, Lansing 48915

Carl F. Berner, MD, Univ. Medical Center, Dept. of Plastic Surgery, Ann Arbor 48104

Wm. G. Bouman, MD, 201 Lafayette Ave., S.E., Grand Rapids 49503

M. Joseph Bowler, MD, Burns Clinic Medical Ctr., P.C., Petoskey 49770

Carlos Carrasquilla, MD, Veteran's Hospital, Allen Park 48101

Minoo B. Chinoy, MD, 325 E. First St., Flint 48502

Jerome A. Conrad, MD, 405 Winter Ave., Big Rapids 49307

Norbert P. Czajkowski, MD, 189 Townsend, Birmingham 48009

A. D. Damschroder, MD, Burns Clinic Medical Ctr., P.C., Petoskey 49770

Jose Del-Rosario, MD, 750 Stewart-Med. Arts Plaza, Monroe 48161

Juan C. DiMusto, MD, 1554 Tuxedo, Detroit 48206

Thomas A. Eggleston, MD, 2867 Germain Dr., Saginaw 48601

John M. Feilla, MD, 21811 Kelly Rd., East Detroit 48021

John A. Fochtman, MD, Burns Clinic Medical Ctr., P.C., Petoskey 49770

Margaret S. French, MD, Veteran's Admin. Hospital, Ann Arbor 48105

Shiro Fujita, MD, Henry Ford Hospital, Detroit 48202

Leon Garbowicz, MD, 1713 7th St., Menominee 49858

Norman J. Gersabeck, MD, 29226 Orchard Lake Rd., Farmington 48024

George H. Greidinger, MD, St. Joseph Hospital, 302 Kensington, Flint 48502

Lovell I. Guanco, MD, 140 Elizabeth Lake Rd., Pontiac 48053

Farouk A. Habra, MD, 987 Calvary, N.W., Grand Rapids 49504

George C. Hardy, MD, Sparrow Hospital, Pathology Dept., Lansing 48912

H. M. Hilal, MD, Burns Clinic Medical Ctr., P.C., Petoskey 49770

Philip E. Hill, MD, Burns Clinic Medical Ctr., P.C., Petoskey 49770
Margaret Jones, MD, Dept. of Path.—MSU, East Lansing 48823
Ahmad Kafi, MD, 20101 James Couzens Hwy., Detroit 48235
William T. Kelly, MD, 755 High St., Adrian 49221
Byung Hoon Lee, MD, 925 Pipestone St., Benton Harbor 49022
Arnold E: Lightbourn, MD, 3800 Woodward Ave., Detroit 48201
George J. Lode, MD, 100 Maple St., Parchment 49004
Walter D. Meester, MD, 1840 Wealthy St., S.E., Grand Rapids 49506
Dorothy M. Mikat, MD, Pontiac General Hosp., Pontiac 48053
Candida C. Misra, MD, 2933 E. Bradford, Birmingham 48010
Arturo L. Mojares, MD, 31112 Pickwick Ln., Birmingham 48009
Donald C. Moore, MD, Burns Clinic Medical Ctr., P.C., Petoskey 49770
Demetrio N. Nasol, MD, 20503 Dequinder, Detroit 48234
Heedong Park, MD, 3169 W. Pierson Rd., Flint 48504
Lewis D. Rickman, MD, 14 Howard St., Mt. Clemens 48043
J. Y. Samson, MD, 310 E. Maumee, Adrian 49221
Manuel I. Santos, MD, 36616 Plymouth Rd., Livonia 48150
Martin J. Seldon, MD, 3750 Woodward Ave., Detroit 48201
Muaiad Shihadeh, MD, 27 S. Prospect St., Ypsilanti 48197
Jean Sinkoff, MD, 19105 W. Seven Mile Rd., Detroit 48219
Ronald D. Snyder, MD, Burns Clinic Medical Ctr., P.C., Petoskey 49770
Norman W. Thoms, MD, 1400 Chrysler Expwy., Detroit 48207
Thelma T. Tumacder, MD, Detroit General Hospital, Detroit 48226
Sara E. Walker, MD, 1405 Ann St., Ann Arbor 48104
Richard Weiner, MD, 20211 Greenfield, Detroit 48235
Nacianceno V. Woo, MD, 785 N. Lapeer Rd., Lake Orion 48035
Charles E. Yee, MD, 5790 M-15, Clarkston 48016

CONSTIPATION
EVACUATE GENTLY

With EVAC-U-GEN — your patients with functional constipation can evacuate gently. Because EVAC-U-GEN has a mild laxative action and tends to cause the stool to be soft — it is highly desirable for those sensitive to harsh laxatives — particularly children, pregnant women, and geriatric patients. Recommend EVAC-U-GEN for the management of functional constipation. It is highly effective. Non-griping. Chewable. Very palatable. Economical.

EVAC-U-GEN®

A highly-flavored and palatable tablet of yellow phenolphthalein, bismuth subcarbonate, bismuth subgallate in special base. Chewable. Bottles of 35 and 100. Adult Dose: Chew 1 or 2 tablets night or morning. Children (up to age 10): 1/2 tablet. A citrus drink taken with tablet will stimulate action.
PRECAUTION: Do not use when symptoms of appendicitis are present and discontinue use if skin rash appears. Dependence on laxatives can result from continued use.

W-C PRECISION PHARMACEUTICALS

SEND FOR SAMPLES.
WALKER, CORP & CO., INC.
Syracuse, New York 13201

DRUG THERAPY PROBLEMS

By Robert M. Pearson, MS
Persis Mehta, PhD
Ann Arbor

Q. What is the mechanism of action of urea and its dosage regimen in the treatment of sickle cell disease? (N.H., Detroit)

A. *The sickling effect is believed to be caused by the formation of intermolecular hydrophobic bonds between the alpha and beta hemoglobin chains which then stack together forming microcables. Urea is capable of denaturing the hydrophobic bonds thus causing a reversal of sickling.*

Up to 40 Gm. of urea, dissolved in 250ml. of a 10 per cent solution of invert sugar, have been infused intravenously over 45 to 90 minutes in a single dose. Occasionally, subsequent doses may be necessary in order to elicit a clinical response. The drug has also been given orally in liquid vehicles in 8 Gm. doses for a total of 40-65 Gm. daily.

Q. What are the advantages, if any, of using, hetacillin in place of ampicillin? (S.F., Jackson)

A. *Hetacillin has no intrinsic antimicrobial activity but owes its bactericidal action to its rapid hydrolysis to ampicillin* in vivo *and* in vitro. *Hence, the antibacterial spectrum and clinical indications for the two drugs are identical. Certain studies have, however, shown that peak serum levels of ampicillin following oral administration of ampicillin are nearly double those attained after an equivalent dose of hetacillin. Although slightly higher serum concentrations may be detected with hetacillin four to eight hours after the initial dose, the total amount of the drug absorbed is significantly less than the total amount of ampicillin absorbed.*

The manufacturer states that hetacillin for parenteral administration is significantly more stable after reconstitution than is ampicillin (6 hours vs. 1 hour). This claim requires some explanation in view of the fact that hetacillin is rapidly hydrolyzed to ampicillin in aqueous solutions of pH above 3.

In the light of the above facts, the Drug Information Center does not consider the use of hetacillin to be advantageous over that of ampicillin.

Q. Can Dalmane® be used in a patient with renal insufficiency? (D.M., Ann Arbor)

A. *Dalmane® (flurazepam HCl) appears to be excreted mainly in the urine in the form of metabolites. In limited studies, 25 per cent of the administered drug has been recovered from human urine during the first day. Another investigation has shown that a total of 81 per cent of an oral dose was excreted in the urine and less than 10 per cent was detected in the feces. The half-life of flurazepam has not been measured in man, presumably due to its rapid elimination by biotransformation.*

In view of the evidence that the kidney is the main pathway for the removal of the drug from the blood stream, it seems quite logical to assume that impairment of renal function would lead to accumulation of the drug, perhaps up to toxic levels. Hence, the dosage of the drug should be reduced and the patient carefully monitored. Alternatively, a hypnotic which is not significantly metabolized by the kidney may be used instead, e.g., ethinamate (Valmid®).

Mr. Pearson is director and Doctor Mehta is associate project coordinator of the Michigan Regional Drug Information Center, University Hospital, Ann Arbor.

check these figures...

they could lead to savings

Umbrella Excess Liability Policy — Our Schedule

✓ Physicians Class 1 & 2 . .	$121.00 Annual Premium*
✓ Physicians Class 3, 4 & 5 .	$205.00 Annual Premium*

* The above premiums assume ownership or use of 2 residences, 2 automobiles, professional liability exposure (basically insured for $100,000/$300,000), and professional office premises exposure. These premiums do not include basic Malpractice coverage. The Umbrella plan is sponsored by the Michigan State Medical Society while the basic Malpractice policy is **not.**

CALL US COLLECT (517) 484-2578

bps **BEN P. STRATTON AGENCY, INC.**
ESTABLISHED IN 1937

107 N. BUTLER BLVD.
LANSING, MICHIGAN 48903
(517) 484-2578

19400 WEST TEN MILE ROAD
SOUTHFIELD, MICHIGAN 48075
357-5083

'Large part of our success due to MSMS support,' says U-M SAMA chapter president

By Stephen F. Lowry
SAMA President
The University of Michigan

Once again the University of Michigan SAMA chapter has had an outstanding year of service to the University, community and the medical profession. As the new president of U-M SAMA chapter, I would like to review what our chapter has done during the past year and to present our plans for the coming year.

During the 1970-71 year we conducted the following projects:

1. Preceptorships—All members of the freshman and sophomore classes were given an opportunity to observe the delivery of health care through local physicians. Nearly 300 students were involved in this project.

The acceptance of this program by both students and preceptors encourages us to continue and expand its place in SAMA activities.

Our new vice-president, Monte Okey, was in charge of this program and will continue to provide leadership next year.

2. MECO Project: In co-operation with your society and the state hospital association, the MECO project is beginning to take hold at Michigan. This past year we were able to place 16 students. Next year we look forward to offering expanding opportunities to our students.

3. Sex Education: What has become one of the most successful sex education programs in the country, again this year, involved over 100 medical students in area schools and community groups. Increased interest in our program has encouraged us to make every effort to involve more students. Program director, Don Aptekar, has also expressed a desire to expand the project into a wider geographical area as we have received requests from all over the state.

4. Movies: A traditional and highly popular series at U-M Medical School is our noon movie program. Under the chairmanship of Mike Riethmiller this project was highly successful and we were able to provide many movies at low prices. However, in an effort to show more movies and to improve the quality of our presentations, we would like to increase the budget of this committee.

5. Yearbook: For the second consecutive year, SAMA has published the *Aequanimitas* at a break-even point. The high quality of this publication under the editorship of Bruce Harper is largely responsible for its success. We are assured of continued excellence with the new editor—Ellen Stubbs.

6. Symposium: In an effort to bring interesting and controversial topics to the attention of U-M medical people, SAMA sponsored a program called "Health Care Legislation" and "Community Medicine." Although attendance at this program was less than we had hoped for, we feel the spirit of our purpose should continue. We hope to present another program during the coming year. Many of the lessons learned in presenting this symposium will be invaluable in future efforts.

We greatly appreciated the participation of Mr. Bruce Ambrose in our program. His presentation was an integral part of a well-rounded program.

7. Conventions: U-M SAMA looks forward to hosting a regional convention on our campus this fall. Students from many midwestern medical schools and several national officers will be attending this event.

At the recently-concluded national SAMA convention in St. Louis our chapter was represented by past president, Jeff Callen, and Andrea Del Gato, who has been active in national SAMA affairs. At this meeting our chapter was commended for its active contribution to student life and several of our programs were singled out as models for other chapters.

8. Medical School Service: Admissions tours—Throughout the year members of our chapter gave daily tours of the medical center to students who were interviewed for admission. We have been asked by the school to continue this service and plan to do so as long as needed.

Internship Evaluations: This spring the Dean's Office was presented with a summary of internships which we purchased from the national SAMA office. We hope it will be of value to students in selecting future positions.

SAMA has, on several occasions, provided students to help at special events and meetings. Our membership is usually quite willing to help when the need arises.

In addition, Michigan SAMA keeps in close communication with other student organizations in an effort to coordinate and reinforce valuable student efforts on the campus and in the community.

These, gentlemen, have been and hopefully will be our activities at Michigan SAMA. A large part of the success is due to your generous support of our chapter. I hope you will see fit to continue this support.

I would welcome any inquiries you may have concerning our programs and hope that communications between us may improve over past years. I will look forward to meeting with you at the state convention this fall.

MAILBOX

Doctor Burdick has question on malpractice

To the editor:

I very much enjoyed your article in *Michigan Medicine* concerning the "Law of Malpractice" in Michigan. You mentioned on two occasions that the attorney for the plaintiff should seek a medical opinion prior to filing suit. I wonder what would be the position of such an attorney if he failed to seek reasonable medical consultation prior to filing a suit and lost a suit with reference to the possibility of a malpractice claim against himself.

It is my personal feeling that a few attorneys are viewing this medical malpractice field as a source of relatively easy and high income. I realize that attorneys also are subject to malpractice, and personally feel, that if there is some way to emphasize the fact that malpractice suits can be brought against any professional individuals, that indeed attorneys might be a little more discerning before accepting such a case and filing suit.

I would appreciate any thoughts or comments you have on this subject.

Very sincerely,
Harry W. Burdick, MD

BRIGHTON HOSPITAL

A non-profit foundation

FOR ALCOHOLISM

Member, Michigan Hospital Association, American Hospital Association

A facility designed to rehabilitate and aid the compulsive drinker in arresting his addiction.

Brighton Hospital meets the standards established by the Michigan State Board of Alcoholism and is recommended by that Board.

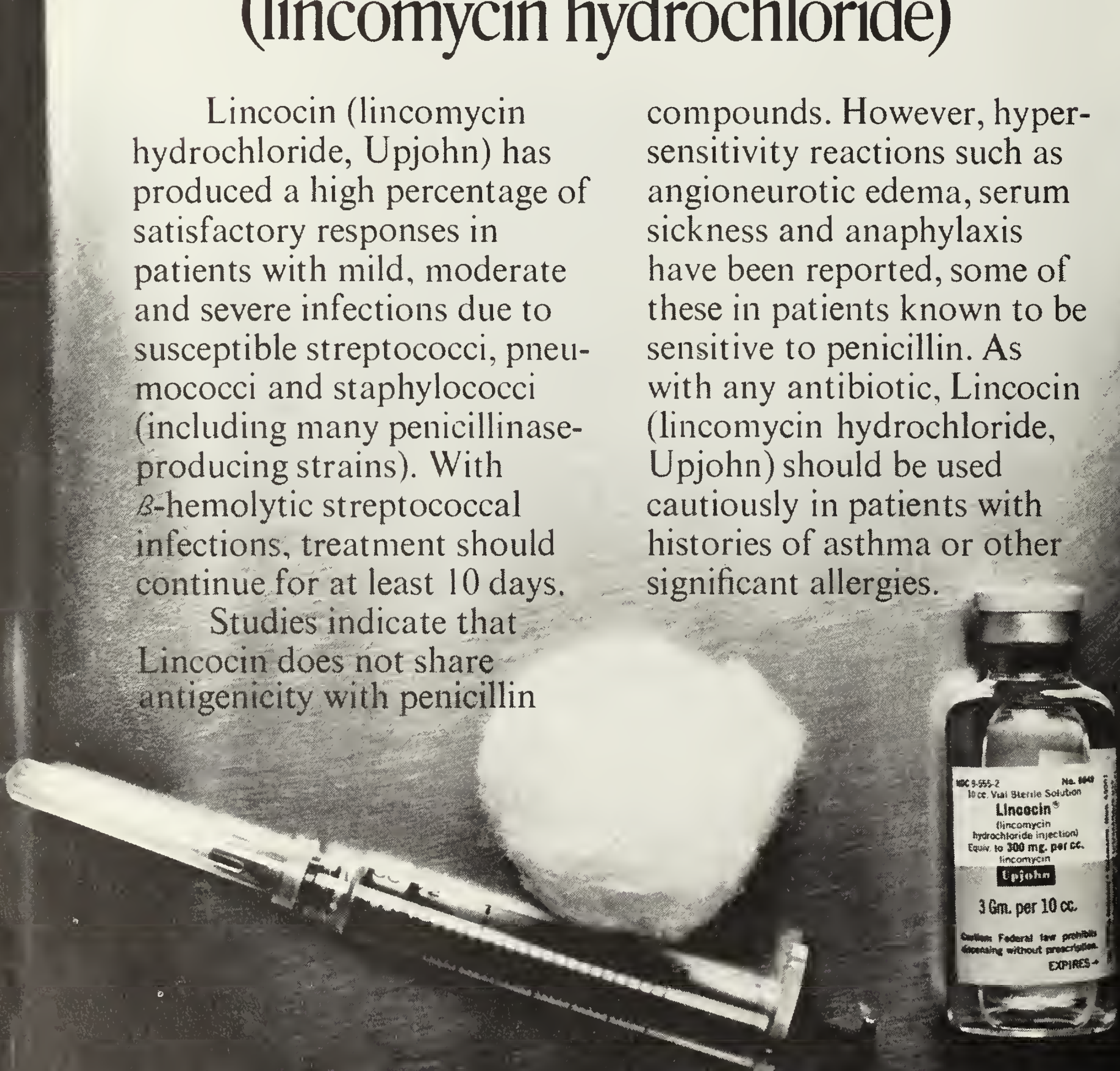
12851 East Grand River
One block south of I-96 at Kensington Rd. Exit
four miles east of U.S. 23
Brighton, Michigan
ACademy 7-1211

(A 16-m.m. sound color film on Brighton Hospital is available for free loan to qualified groups.)

Hypersensitivity to penicillin is a good reason to consider Lincocin® (lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With ß-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.


NDC 9-555-2
No. 6049
10 cc. Vial Sterile Solution
Lincocin®
(lincomycin hydrochloride injection)
Equiv. to 300 mg. per cc. lincomycin
Upjohn
3 Gm. per 10 cc.
Caution: Federal law prohibits dispensing without prescription.
EXPIRES

So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn)

10 cc. Vial Sterile Solution
Lincocin®
(lincomycin
hydrochloride injection)
Equiv. to 300 mg. per cc.
lincomycin
Upjohn
3 Gm. per 10 cc.
EXPIRES

© 1971 The Upjohn Company

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

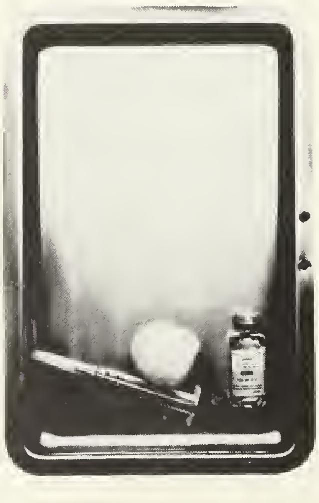
Syrup, 250 mg. per 5 ml.—60 ml. and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

JA71-1203 MED B-5-SR (KZL-6)

The Upjohn Company
Kalamazoo
Michigan 49001

Upjohn



Ancillary

Blue Shield expects benefits, claims to increase substantially in 1971

Michigan Blue Shield expects to increase by more than 20 per cent the number of benefits it provides in 1971, according to John C. McCabe, president. He also predicts an increase in total claims of 17.9 per cent.

In addition, Mr. McCabe, giving the Blue Shield annual report early in May, announced that Shield will implement a pilot prepaid project with the Detroit Model Neighborhood Comprehensive Health Program.

"This program will permit some Blue Shield eligible subscribers to enroll voluntarily for health care through a prepaid, comprehensive group practice," Mr. McCabe explained.

"Beyond these specifics for 1971 are other realities not so easily measured," he continued. "The pressure of cost escalation is relentless and while ways have been found to restrain and control these costs, they will continue to rise." McCabe declared, however, that Michigan Shield operations are currently fiscally sound.

"October was the turnaround month," he said. "For the first time in more than a year, income began to exceed payout." The favorable reverse was due, he said, to subscription rate increases, a cost stabilization and control program which was the first of its kind in the nation and which saved approximately $5.5 million, and a utilization review program which recaptured more than $1 million in payments.

He asserted that the cost control program is continuing into 1971 with modifications which are tied to an element of the cost of living index and which will have a limiting effect on increases in physicians' charges.

In 1970, Mr. McCabe reported, Blue Shield paid out $250.9 million in benefits under its private sector programs, or 19 per cent more than in 1969. In the same time, 10.6 million claims, including 4.9 million drug claims, were processed, for a 76 per cent increase over the previous year.

Medicare payments for persons 65 and over were $59.5 million in 1970, against $53.5 million in 1969, while Medicaid payments for persons eligible for state assistance were $44.5 million in 1970, compared to $36.3 million in 1969.

Michigan Blue Shield's operating expense for the year was 7.22 per cent of income, lower than 1969 and lowest among the 20 largest Blue Shield Plans in the nation, Mr. McCabe said.

U-M developing accelerated MD degree program

Starting in the fall of 1972 medical students at the University of Michigan will be given the opportunity to complete their entire university career, including pre-medical and medical school work, in just five years.

The National Institutes of Health approved a $1.5 million grant in April allowing the U-M to develop a pilot program, which is unique in combining economics, history and literature courses with medical courses throughout the five-year course. Both the medical school and liberal arts colleges will be developing the program.

Fifty bright high school students will be selected for the first class. About 20 to 25 are expected to complete the course in five years, while another five to ten students may earn their MD degrees in six years.

Speciality lectures for area hospitals aim of Berrien doctors

Southwestern Michigan physicians have made further strides toward organization of the Southwestern Michigan Consulting Services. Their aim is to provide teaching sessions in the various specialty areas for hospital staffs.

Frank Bunker, MD, Benton Harbor, is coordinator of the project, which he hopes eventually will involve 75 per cent of the medical consultants in the area.

Doctor Bunker envisions informal weekly sessions for several months at each hospital, planned with the hospital program chairmen and offered to the medical staffs, nursing staffs and administrations. The costs of coordinating the program are to be borne by Regional Medical Programs, and overseen by an RMP advisory board to be appointed from among area health professionals.

Chairmen of professional divisions of the Southwestern Michigan Consulting Services are John Carter, MD, Benton Harbor, internal medicine; Robert Green, MD, St. Joseph, obstetrics-gynecology; Richard Elghammer, MD, Benton Harbor, pediatrics, and Arthur S. Haight, MD, Benton Harbor, surgery.

AMA emphasizing issues it is for in new campaign

Perhaps you have already seen the beginning of the AMA's special communications program in three national magazines and selected local media. Part of the effort, launched the first week in June, focuses on better personal health care. Part provides information on organized medicine's response to various national health care issues.

The AMA's media plan calls for six to eight full-page insertions in *Life,* the *Reader's Digest* and *Ebony* during 1971, possibly 10 insertions in major newspapers, plus very limited exposure on television in a few cities.

"By emphasizing the many things the AMA is for, we hope to create a more receptive climate . . . in which there will be a better understanding of organized medicine and its ideas for improving our health care system," explains a representative of McCann-Erickson advertising agency, which is handling the campaign.

New PAS book compares bed usage of 1,079 U.S. hospitals

Members of hospital utilization committees anxious to compare bed usage by patient classification in their own institutions with those in other hospitals will be interested in a new book published by the Commission on Professional and Hospital Activities in Ann Arbor, Mich.

Entitled *Length of Stay in PAS Hospitals, United States, Regional 1969,* the volume reviews 8 million discharges from 1,079 PAS hospitals in 1969, divided into four geographic regions: East, South, Central, and West. For each of the 6,250 classes of patients, an average stay with a measure of its variability has been computed and is displayed for each of the four regions.

Patients are classified under 217 diagnosis and 193 operation categories. Each of these is subdivided into five age ranges, which are further subdivided into two groups according to whether there was a complicating diagnosis. Within the diagnosis categories, the patients are further split into those operated on and not operated on.

The book is available from CHPA, 1968 Green Rd., Ann Arbor, 48105, at a cost of $8.

Illinois Medical Society establishes foundation

Illinois State Medical Society House of Delegates in special session on May 16, 1971 approved a proposal to establish an Illinois Foundation for Medical Care. ISMS officials report the foundation is designed to upgrade private and governmental health care coverage to include outpatient, X-ray and laboratory tests, prenatal care, immunizations, consultative care and other essential services.

ISMS explains, "benefits to the foundation program will be provided at the local level by county or multi-county foundations which are autonomous from the state foundation. The local foundations also can experiment with other forms of health care delivery such as Health Maintenance Organizations, as proposed by President Nixon and Governor Ogilvie."

Hastings' physician center a real success story

The new Physicians' Center adjacent to Pennock Hospital in Hastings, which has been instrumental in attracting four new physicians to the town in the last five years, is being expanded.

The addition, expected to be completed in August, will accommodate eight physicians. It is being built to meet the request for more space sought by area physicians.

The center was fostered by the hospital to attract physicians to the community and to provide improved medical services for area residents. Its success in both areas was cited by Hastings representatives at the recent MSMS workshop on attracting more physicians to rural areas.

You get just about the same headroom and legroom in a $3,600 Audi as you do in a $23,800 Rolls-Royce.

The Audi isn't a very big car. On the outside.

But don't let that fool you about the size of the car on the inside.

You'll find there's more headroom than you'd ever expect. Enough for, say, a person 6'6". And if he's got unusually long legs (which a person of his size usually has) he won't have to sit clutching his knees. Because there's more legroom than you'd ever expect.

Mind you, he's not the only one who would sit comfortably. The Audi can seat a family of five rather nicely.

Now the $23,800[†] Rolls-Royce isn't the only great car the Audi has a lot in common with.

The Audi has rack-and-pinion steering just like the Ferrari 512 racing car. And front-wheel drive just like the Cadillac Eldorado.

The Audi has the same type of brakes as the Porsche 917 racing car. And the same amount of trunk space as the Lincoln Continental.

Our interior looks so much like that of the Mercedes-Benz 280SE, you can hardly tell them apart.

And as for service, you'll get the same kind of expert service a Volkswagen gets. Because a Porsche Audi dealer is part of the VW organization.

Impressed? You should be. After all, the Audi bears a startling similarity to some of the world's finest automobiles.

But what makes the Audi especially impressive is its price tag.

It's a lot less than you'd expect to pay for that many great cars.

The $3,600[*] Audi®

Porsche Audi: a division of Volkswagen

[*] Suggested retail price East Coast P.O.E. $3595. Local taxes and other dealer delivery charges, if any, additional.

[†] Manufacturer's suggested retail price. Local taxes and other dealer delivery charges, if any, additional.

Wood Imports, Inc.
15415 Gratiot Ave., Detroit

Phil Gordon's, Inc.
2924 E. Grand River Ave., Lansing

Prestige Automobiles, Inc.
2955 S. Division Ave., Grand Rapids

Tom Sullivan Porsche Audi, Inc.
499 S. Hunter Blvd., Birmingham

Explains methods used to determine Medicare and Medicaid percentiles

By John Anthony, Chief
MSMS Economic Information Bureau

In recent months there has been a great deal of misunderstanding as to how Blue Shield reimburses the physician for his Medicare and Medicaid services. The term "usual and customary" has been battered about so often that a clearer understanding of the reimbursement formula is in need.

At the present time, physicians are reimbursed for Medicare patients with a maximum level set at the 75th percentile of 1969 prevailing charges. This does not mean that Blue Shield pays 75% of the charges or that the first 75% of the bills submitted are paid in full. It means something entirely different. In fact, let's follow how they actually determine the physician's reimbursement, according to the current Medicare system.

Medicare reimbursement works in this manner: the weighted median charge for a service from each doctor is ranked in ascending order. From this array of weighted median doctor's charges the 75th percentile is calculated. The charges above the 75th percentile are paid at the 75th percentile level.

An example of this procedure may make it clearer:

Example: The median charge, the one in the middle, by a doctor for a specific procedure is determined,

10, 10, 10, 12, 14, 14, 15

His fee—$12—is ranked with the other weighted median fees of the other physicians performing this same procedure in his geographic area. Since this particular doctor did seven of these procedures, his weighted median or frequency would be seven.

Let's assume that twenty physicians each do seven of these procedures and the following array consists of their median fees:

| 10, 10, 12, 13, 13, | 14, 14, 14, 15, 15, | 16, 16, 16, 16, 17, | 18, 18, 19, 20, 21 |

0 25th 50th 75th 100th

Percentile

In this array the 75th percentile is at the $17 level. All the fees below $17 will be reimbursed as charged, as long as what the physician bills has been determined to be his customary charge. If so, the physician who bills $12 will be paid $12, the physician who bills $14 will be paid $14, the physicians who charge $18, $19, $20, or $21 will only be paid $17.

Blue Shield has an individual file of charges for the most frequent procedure of every doctor. His median charge for a procedure determines his customary charge. Since the Medicare system is using 1969 charge data for a prevailing charge screen the doctor's fee for those patients is maintained at 1969 levels.

The actual array for most procedures is more complicated. The above example assumed all charges were weighted equally, where in reality certain doctors do many more procedures of a specific nature than others.

The next two charts show how the weighted median gives more emphasis to the charges used more often.

Usual (Median) Charges for a Given Procedure

Doctor	Usual (Median) Charge	Frequency Performed
A	$50	20
B	60	20
C	50	70
D	77	20
E	70	10
F	65	10
G	80	30
H	85	20
		200

Calculation of the Prevailing Charge

Usual (Median) Charge	No. at this Charge	% of Total	Cumulative %
$50	90	45%	45%
60	20	10%	55%
65	10	5%	60%
70	10	5%	65%
77	20	10%	75%*
80	30	15%	90%
85	20	10%	100%
	200	100%	

*Prevailing Level

In this example the 75th percentile encompasses the charges up to and including $77. The charges billed Medicare that are $80 or $85 will only be paid $77. However, of the total $12,690 amount

MICHIGAN STATE MEDICAL SOCIETY
ORIENT ADVENTURE

Two fun-filled weeks in exotic and colorful Japan and Hong Kong. Our complete Orient Adventure costs much less than round trip tourist air fare, yet includes direct 707 private jet flights, deluxe hotels, gourmet meals, all the freedom of individual travel, plus many other exclusive features. The Orient Adventure is departing from Detroit, Thursday, November 4, 1971

Michigan State Medical Society
Box 950, East Lansing, Mi. 48823

Enclosed is my check for $ __________
($100 per person) as deposit.
Name ____________________
Address ____________________
City, State __________ Zip ______

☐ Please send me full color brochure.

$898.00
Plus $35. Tax and Service

DEPARTING DETROIT — OCTOBER 11 — SOLD OUT
DEPARTING DETROIT — NOVEMBER 4 — SPACE AVAILABLE

billed, $12,440 will be reimbursed to the physicians or 98.0% of the total. This percent will vary upon the distribution of charges.

If there is not an even break-off point that includes all the same dollar charges at the 75th level, then the next highest percentile level is used that allows all "same dollar" charges. This prevailing charge, at times, will represent a higher percentile than the 75th percentile.

Calculations for Medicaid reimbursement originally tracked Medicare prevailing levels. However, both customary and prevailing charges have been frozen by the Michigan Department of Social Services to pre-1969 charge data. Therefore, the current percentile would be determined by the number of services paid in full and differs in various categories of service.

The mode charge is the charge used most often. With Medicaid the physician's mode charge, prior to 1969, is his customary charge. The prevailing screens for each geographic area were developed originally by using all charges under the program, not just modal charges.

Doctors' attention urged by AMA Council to problems of VD

In view of the alarming increase in reported cases of infectious syphilis and because gonorrhea is now pandemic in the United States, the Council on Environmental and Public Health, American Medical Association, has prepared the following statement for the information and guidance of medical societies.

The problems of VD are many; the council notes. Permissiveness, limited staffs in public health departments, insufficient funds, reluctance on the part of physicians to report VD cases, and ignorance on the part of the public about the dimensions of VD, prevention and treatment are among them.

Medical societies are urged to publicize and promote among their members the need for attention and action to the VD problem.

Statement on Venereal Disease

The American Medical Association Council on Environmental and Public Health reports that gonorrhea ranks first and syphilis third among the reportable communicable diseases in the United States. For the year ending June 30, 1970, infectious syphilis rates were eight percent higher nationally than a year earlier, with annual increases spread over 33 states and an estimated incidence between 70-80,000 reported cases; there are 250,000 cases of all forms of syphilis estimated to be diagnosed and treated each year.

At the same time, gonorrhea morbidity exceeded 573,000 reported cases. Gonorrhea is pandemic in the United States, with an estimated two million cases.

The Council urges medical societies to acquaint their membership with the growing and alarming dimensions of the VD problem. Physicians should take all appropriate measures to reverse the rise in venereal disease and bring it under control.

Physicians in private practice treat approximately 80 percent of the syphilis and gonorrhea that comes to diagnosis but report to public health departments only one out of every eight cases of syphilis and one out of every nine cases of gonorrhea they treat. Physicians should assist public health departments by reporting the VD cases they treat. Medical societies are urged to cooperate and give broad support to public health authorities. Much effort must still be made by health departments and medical societies to foster mutual trust so that public and private medicine can work effectively for the control of both syphilis and gonorrhea.

The Council also urges medical societies to continue efforts for the enactment of state laws to permit physicians legally to treat VD cases of minors without obtaining parental consent; twenty-nine states and the District of Columbia now have laws which permit physicians to treat a minor for VD without adult consent.

The American Medical Association is making VD a national theme for Community Health Week - 1971, with suggested dates of October 17-23. Informational and promotional material will be available for medical societies. The AMA publication **PR Doctor**, January 1971, featured the problem of venereal disease, which included reports of excellent programs underway by state medical societies.

The Council encourages the publication of more articles in professional journals on venereal disease and its control for the guidance of the profession. Medical societies are asked to support education of patients and the public through more extensive and imaginative use of all available media and through school curricula.

Choose the smooth road

to thyroid replacement therapy

The automati

transition.

Your patients start thyroid therapy smoothly, easily. They feel better all along the way with no metabolic "bumps."

The gradual physiologic action of T_4 SYNTHROID provides virtually an "automatic" transition through the range of complete thyroid replacement therapy.[1]

Predictably responsive!

This kind of comfortable patient response has made SYNTHROID the most widely prescribed brand of thyroid drug in the United States. It's a Cadillac of thyroid medications ... with Volkswagen economy.[2]

The road to normalized thyroid status is a continuous one. You make it smooth and economical with SYNTHROID.

1. The deiodination of T_4 to T_3 at the cellular level has been discussed in the literature. Reprints on the subject are available from the Flint Laboratories Medical Department. Use of T_4 alone therefore provides your patients with a natural hormone combination of T_3—T_4.
2. Patient cost of SYNTHROID is less than a penny a day more than desiccated thyroid. SYNTHROID costs patients nearly 50% *less* than the synthetic combination products: American Druggist BLUEBOOK, March 1970-71

Synthroid®

(sodium levothyroxine)

FREE

MEDICATION DISPENSERS

TO START ALL YOUR PATIENTS ON SYNTHROID, IN THESE STRENGTHS:

0.05 mg. (white); 0.1 mg. (yellow); 0.15 mg. (violet); 0.2 mg. (pink).

seven color-coded strengths plus injectable

Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) **Injection** is indicated in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. When a patient does not respond to oral therapy, SYNTHROID (sodium levothyroxine) injection may be administered intravenously to avoid any question of poor absorption by either the oral or the intramuscular route.

Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmond's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction.

Side effects: The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100 and 500. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) INJECTION may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC.
Morton Grove, Illinois 60053

As your hypothyroid patients travel along the smooth road, let us be of service in these 4 specific ways:

1 FREE FILM AND BOOK ON HYPOTHYROIDISM: In a 30-minute, 16-mm. sound/color film, 5 prominent endocrinologists discuss "Thyroid Deficiency—Current Concepts of Diagnosis and Treatment". Film available on FREE loan to physician groups or hospitals.

A new book, soon to be published, is devoted to the clinical aspects of hypothyroidism. The author, a leading endocrinologist, describes the many faces of the condition and emphasizes the importance of clinical assessment of the patient. Write, or ask your Flint man, to be placed on our list to receive a free copy.

THYROID DEFICIENCY
Current concepts of diagnosis and treatment

2 NEW THYROID FUNCTION TEST BOOK: Newly published *Guideposts to Thyroid Therapy* discusses the tests most appropriate for use with each type of thyroid medication. Fully describes thyroid function tests and places their relative values in perspective for physicians. It will give you valuable new insights into the role of these tests in diagnosis and treatment. FREE—ask your Flint man.

Guideposts to Thyroid Therapy

3 TO START THERAPY, FREE TAB-MINDER dispensing units, color-coded to match colors of SYNTHROID tablets in starting dosage strengths. TAB-MINDER helps patients to regularly take the thyroid dosage you prescribe, avoid medication errors. Ask your Flint man.

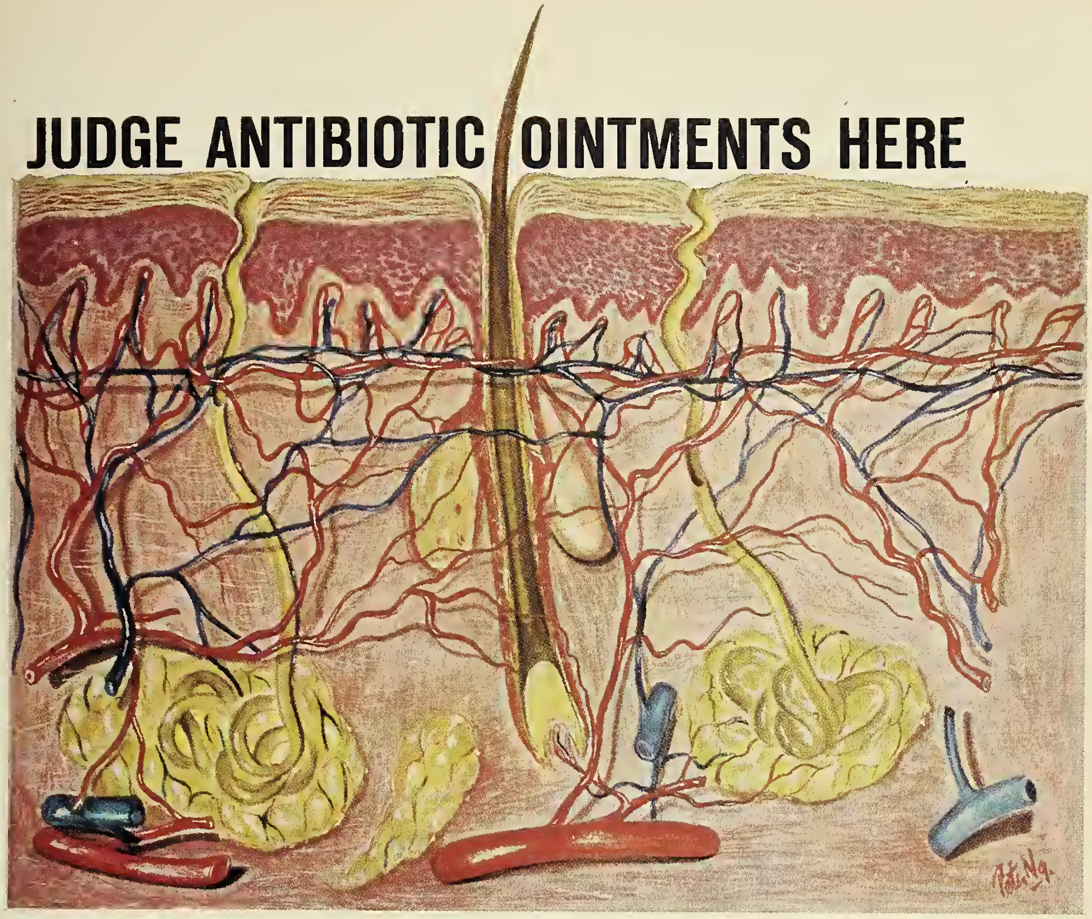
FREE
MEDICATION DISPENSERS
TO START ALL YOUR PATIENTS ON SYNTHROID, IN THESE STRENGTHS:
0.05 mg. (white); 0.1 mg. (yellow); 0.15 mg. (violet); 0.2 mg. (pink).

4 SYNTHROID® INJECTION FOR THYROID EMERGENCIES: Whenever (as in myxedema coma) rapid replacement of thyroid hormone is needed to sustain life, prompt clinical response is essential. SYNTHROID INJECTION makes this therapy instantly available. Useful also in postoperative thyroid medication situations until oral therapy can be reinstated. Ask your Flint man for further information.

FLINT
Synthroid Injection

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC.
Morton Grove, Illinois 60053

JUDGE ANTIBIOTIC OINTMENTS HERE



Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

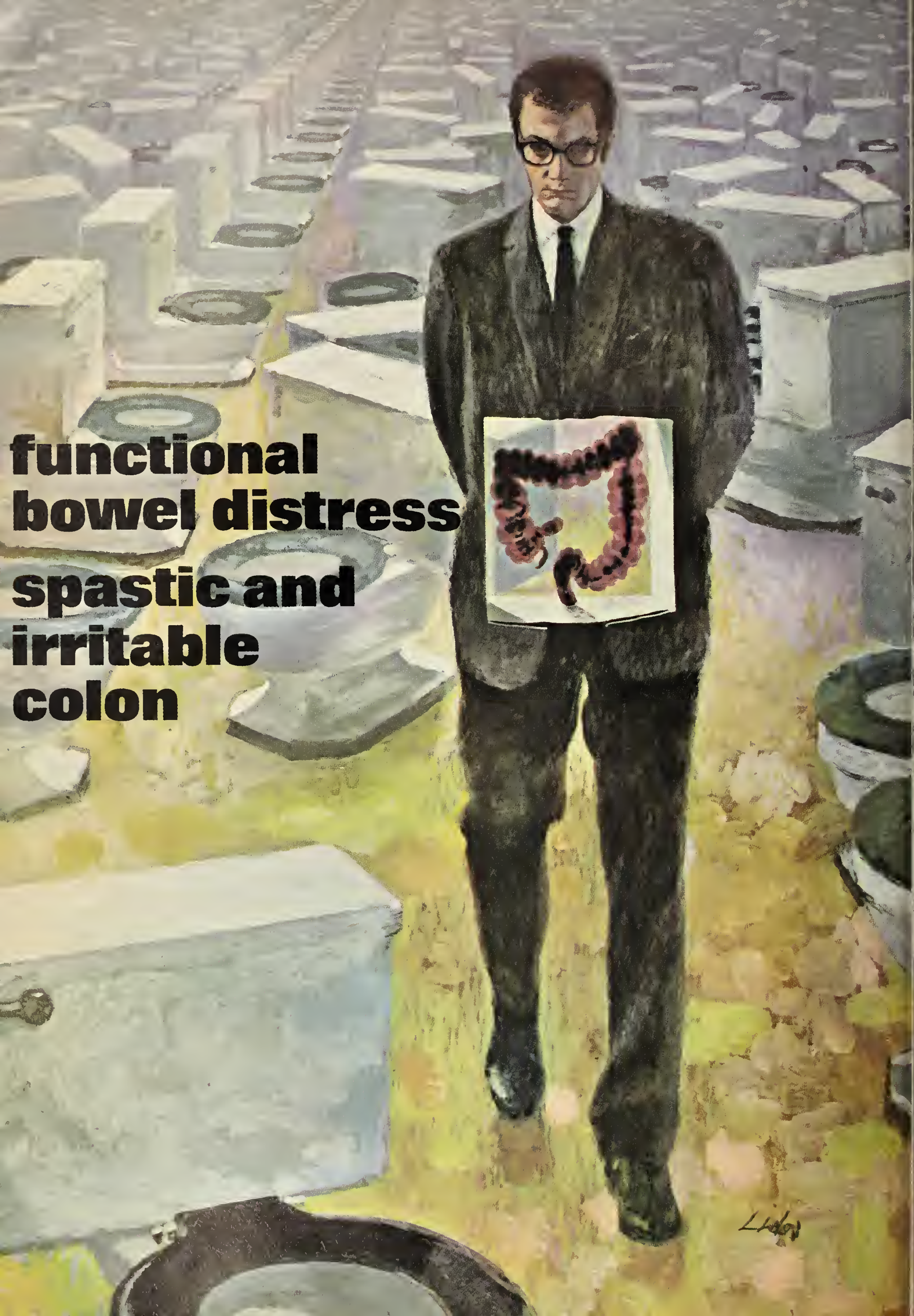
'NEOSPORIN'®
brand

POLYMYXIN B-BACITRACIN-NEOMYCIN
OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

functional bowel distress

spastic and irritable colon



move up to "the Robinul response"

when lower G-I symptoms demand a potent synthetic antispasmodic

In treating hypermotility associated with functional lower G-I disorders are you disappointed in the results you've been getting with some of the synthetics? Then *move up* to a potent antispasmodic—Robinul® Forte (2 mg. glycopyrrolate). It provides prompt, pronounced, prolonged suppression of hypermotility, making it a highly effective agent in functional bowel distress, as well as in spastic and irritable colon. Robinul Forte also exerts a more selective action on the gastrointestinal tract. If the patient has a "one tract mind" concerning his lower G-I symptoms, you can help control the anxiety and tenseness by prescribing Robinul®-PH Forte (2 mg. glycopyrrolate with 16.2 mg. phenobarbital —warning: may be habit forming).

Robinul® 2 mg. Forte (glycopyrrolate)

■ **INDICATIONS** Robinul Forte (glycopyrrolate, 2 mg.) and Robinul-PH Forte are double-strength dosage forms of glycopyrrolate. They are primarily indicated for patients who are less responsive to anticholinergic therapy and for control of the more prominent symptomatology associated with acute episodes of gastrointestinal disorders. Emphasis should be on total management, with due consideration of the various therapeutic modalities available, including diet, antacids, anticholinergic agents, sedatives, and attention to emotional problems. Accordingly, glycopyrrolate is recommended in the management of gastrointestinal disorders amenable to anticholinergic therapy, such as: (1) duodenal ulcer, duodenitis, pylorospasm; (2) gastric ulcer, gastritis, esophageal hiatal hernia, hyperchlorhydria, pyrosis, aerophagia, gastroenteritis; (3) esophagitis; (4) cholecystitis, chronic pancreatitis; (5) spastic and irritable colon, ulcerative colitis, functional bowel distress, diverticulitis, acute enteritis, diarrhea; and (6) splenic flexure syndrome, neurogenic gastrointestinal disturbances. When these conditions are associated with psychic overlay, the formulation with phenobarbital may be indicated. ■ **CONTRAINDICATIONS** Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte (glycopyrrolate with phenobarbital), sensitivity to phenobarbital. ■ **PRECAUTIONS** Administer with caution in the presence of incipient glaucoma. ■ **SIDE EFFECTS** The most frequent side effect noted during clinical trials was dry mouth. Thirty-three (3.3%) of 1,009 patients receiving 1 to 32 mg. of glycopyrrolate a day complained of dry mouth of moderate to severe degree, but only 11 discontinued treatment because of this. Blurred vision, constipation, and urinary hesitancy have been reported infrequently. Other side effects associated with the use of anticholinergic drugs include: tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash. ■ **DOSAGE** The average and maximum recommended dose of Robinul Forte (glycopyrrolate, 2 mg.) or Robinul-PH Forte is one tablet three times daily (in the morning, early afternoon, and at bedtime). To obtain optimum results, dosage should be adjusted to the individual patient's response. After the more severe symptoms associated with acute conditions have subsided, the dose may be reduced to the minimum required to maintain symptomatic relief. ■ **SUPPLY** Robinul Forte (glycopyrrolate, 2 mg.) is available as scored, compressed pink tablets engraved AHR/2 in bottles of 100 and 500. ■ Robinul-PH Forte (glycopyrrolate, 2 mg., with phenobarbital, 16.2 mg.) is available as scored, compressed blue ablets engraved AHR/2 in bottles of 100 and 500.

A. H. Robins Company, Richmond, Va.

A-H-ROBINS

The all-day, all-night summer cold and allergy pill.

Novahistine LP can give your patients the convenience of twice-a-day dosage—morning and bedtime—along with prompt relief from the symptoms of allergic rhinitis, hay fever or summer colds. These continuous-release tablets contain a vasoconstrictor-antihistamine formulation that goes to work rapidly and lasts for hours. Even when nasal congestion is the result of repeated allergic episodes, patients can usually enjoy around-the-clock relief. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

THE DOW CHEMICAL COMPANY, Rx Pharmaceuticals, Indianapolis

Novahistine® LP decongestant

(Each tablet contains 25 mg. of phenylephrine hydrochloride and 4 mg. of chlorpheniramine maleate.)

About doctors

Bay City doctor earns firemen's praise

It's not always brickbats that are tossed at physicians. Sometimes it's roses.

For example, the following letter was mailed to the Bay City *Times*:

> To the Editor:
>
> With so much criticism directed at doctors who refuse to make house calls or after-office-hours calls, I would like to offer thanks and praise to a Bay City physician who attended two Bay City firefighters who received eye injuries while fighting an early morning fire this past week.
>
> This fine doctor came to his office not once in the early morning hours but twice—once at 3 a.m. and again at 4:30 a.m.
>
> We appreciate those in the medical profession who are dedicated to serve man.
>
> Many thanks from the Bay City Firefighters.
>
> Donald J. Besaw, Pres.
> Bay City Firefighters
> Local 1435
> Edward S. Glaza, Sec'y.

Harvey M. Andre, MD, Grand Rapids, is one of two outstanding alumni honored at commencement activities of the Grand Rapids Junior College. Doctor Andre is chief of orthopedic surgery at Butterworth Hospital. He obtained his medical degree from the University of Michigan.

Earl R. Addison, MD, Crystal Falls, is Citizen of the Year in his community, honored by the Crystal Falls Lions Club. Doctor Addison has served for 30 years in the Upper Peninsula town and is a past president of the Dickinson-Iron County Medical Society.

Ralph Blocksma, MD, Grand Rapids, is chairman of the board of the Medical Assistance Programs, Inc., a voluntary agency that sends medical help to missionary physicians around the world.

Gilbert B. Bluhm, MD, Detroit, is current president of the American Federation of Clinical Investigation, Detroit chapter, and chairman of the Michigan Arthritis Foundation's Professional Education Committee.

Harold E. Bowman, MD, Grand Rapids, is new president of the Kent Medical Foundation, succeeding Marvin D. Stahl. New secretary of the organization is Erwin R. Fitzgerald, MD, Grand Rapids. The board continues to pay the tuition of 25 students attending four local colleges and three schools of nursing.

George M. Brown, MD, Bay City, has been honored with the naming, for him, of the new George M. Brown Orthopedic Center at Kolb Intermediate School in Bay City. The center opened May 6 with facilities for 42 Bay County physically-handicapped youngsters, culminating long efforts by Doctor Brown.

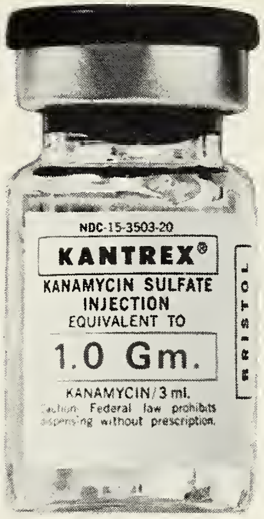
Darrell A. Campbell, MD, and Vergil Slee, MD, Ann Arbor, are new chairman of the board and president, respectively, of the Commission on Professional Hospital Activities, medical research computer center in Ann Arbor. Doctor Campbell represents the American College of Surgeons on the Board. Doctor Slee has been director of the CPHA since its creation in 1955.

Daniel K. Christian, MD, Kalamazoo, is chairman of the physicians' section of the American Cancer Society Drive.

(Continued on Page 660)

Meeting bi-monthly to coordinate their programs and undertake cooperative ventures are the deans of Michigan's four medical schools. From the left are John A. Gronvall, MD, of the University of Michigan Medical School; Andrew D. Hunt, Jr., MD, of the Michigan State University College of Human Medicine; T. N. Evans, MD, (acting dean) of the Wayne State University School of Medicine, and Myron S. Magen, DO, of the MSU College of Osteopathic Medicine. Among their joint projects is a plan to work with MSMS to raise funds for medical students' scholarships and loans.

On formulary and in the pharmacy...



take advantage of the **Kantrex**®
KANAMYCIN SULFATE
experience

A dozen years of Kantrex usage have established its efficacy, its versatility, its simplicity.

And its economy.

Faced with a life-threatening infection, the physician cannot conscionably consider economy a primary factor in selection of an appropriate antibiotic. However, when susceptibility reports are in, the infecting pathogens are often found to be susceptible to several antibiotics. The physician may then consider dose requirements and cost in his prescribing decision.

Kantrex requires one simple standardized dose for almost any patient with any susceptible mixed Gram-negative/staph infection (Pseudomonas are resistant). The usual adult daily dose of Kantrex is only 1.0 Gm.... and the usual total course of therapy, 7-10 Gm. Translated to dollars and cents, the daily cost of Kantrex therapy may be only 1/2 to 1/8 that of therapy with other parenteral antibiotics used for serious hospital infections.

Doesn't it make good sense to use Kantrex?

Experience proves it does.

BRIEF SUMMARY OF PRESCRIBING INFORMATION
8) 7/8/70
For complete information, consult Official Package Circular.

Warning: Irreversible deafness can occur Tinnitus or vertigo may also occur and indicate vestibular damage and impending deafness. The risk is sharply increased with renal dysfunction. In such cases, decrease size and frequency of doses. Discontinue kanamycin and check hearing if azotemia increases. Watch carefully for ototoxicity in older patients and patients receiving more than 15 Gm of kanamycin. To avoid neuromuscular paralysis with respiratory depression, postpone intraperitoneal instillation in post-operative patients until recovery from anesthesia and muscle relaxants is complete. Avoid concurrent use of other ototoxic drugs including ethacrynic acid. Safety in pregnancy is not established

ndications: Serious infections due to susceptible strains of *E coli*, Proteus sp., *nterobacter aerogenes*, *K pneumoniae*, *Serratia marcescens* and *Mima-Herellea* Culture and sensitivity studies should be performed.
Contraindications: A history of hypersensitivity to the drug Prior auditory damge by kanamycin or other agents may be a contraindication if effective alternave therapy is available.
recautions: Obtain audiograms before and during therapy in patients with renal dysfunction when treatment lasts more than 5 days. Stop Kantrex if tinnitus or hearing loss occurs. Hydrate patients to prevent chemical irritation of the renal tubules Assess renal function periodically, both before and during therapy If signs of renal irritation occur (casts, cells, proteinuria) increase hydration and reduce the dosage or the frequency of dosage if necessary – in azotemic patients the frequency (in hours) of doses may be obtained by multiplying the serum creatinine by 9. If azotemia or oliguria occur, discontinue therapy. Mycotic or bacterial superinfection may occur.
Adverse Reactions: Irritation or pain at the injection site, skin rash, drug fever, headache and paresthesias
Dosage and Administration: The maximum total daily dose should not exceed 1.5 Gm by all routes of administration. The usual dose is 7.5 mg./Kg./12 hours I.M. The average adult dose is 1 Gm. daily. Uncomplicated infections due to sensitive organisms should respond in 24 to 48 hours.

If no response occurs in 3 to 5 days, stop therapy and recheck the bacterial sensitivities Hydrate patients well to minimize renal irritation. Inject deeply into the upper outer quadrant of the gluteal muscle. Discard partially used vials after 48 hours. The drug should not be physically mixed with other antimicrobials
Supplied: Rubber capped vials as a ready-to-use sterile aqueous solution in two concentrations: 0.5 Gm. in 2 ml. and 1.0 Gm. in 3 ml. Also available – Pediatric Injection 75 mg in 2 ml.

A.H.F.S. Category 8:12.28

BRISTOL
BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

Paul J. Christenson, MD, MPH,
formerly of Bristol, Tenn., is new Ottawa County Medical Director.

Esther H. Dale, MD, and
Maurice Croll, MD, Detroit
are 1971 Distinguished Service Alumni of the WSU School of Medicine, so named at the annual Alumni Clinic Day at the Sheraton-Cadillac Hotel May 12 in Detroit. Doctor Dale is professor emeritus and research associate in the medical school and an expert in cancer detection, and Doctor Croll is a Detroit eye surgeon who spends his vacations treating South American Indians. He is chief of the eye department at Grace Hospital and adjunct associate professor at the WSU School of Medicine.

Lionel L. Davis, MD, Mt. Pleasant,
chairman of the MSMS Committee on Rehabilitation, was honored by the citizens of Isabella County May 13 with the presentation of a Distinguished Service Health Award plaque. Doctor Davis, who is retiring Aug. 1 to a mountain home in Blowing Rock, N.C., was recognized for his organization of the Isabella County Health Planning Council in 1960; for being instrumental in getting the community hospital built and attracting 10 specialists to the local medical clinic he organized; and for being the driving force behind the establishment of the local extended care facility. He also established the area ambulance service, and united the MDs and DOs of his area. Doctor Davis also initiated the MacKenzie Trust Fund to provide donations for education and equipment for all area health facilities.

Charles F. Frey, MD, Ann Arbor,
chairman of the Michigan Emergency Services Health Council, is among a group of emergency department physicians throughout the U.S. who have formed the University Association for Emergency Medical Services. The national body, which represents most of the country's 120 medical centers and medical schools, held its first annual meeting at the U-M Towsley Center for Continuing Medical Education May 14-15.

Ralph S. Green, MD, Oak Park,
is new president of the Michigan Society of Psychiatry and Neurology and the Michigan District Branch of the American Psychiatric Association. New president-elect for the 1971-72 year is Leonard Rosenzweig, MD, Grand Rapids.

Douglas A. Haddock, Jr., MD, Kalamazoo,
has been appointed to a three-year term on the Committee on Scientific Programs of the American Academy of General Practice.

E. C. Hansen, MD, Manistee,
is the recipient of a certificate of appreciation for his service to the local Lions' Club's Eye Bank Program. Doctor Hansen is chief of the medical staff at West Shore Hospital in Manistee.

Roy A. Highsmith, MD,
is new director of the Lenawee County Health Department, while Paul J. Christenson, MD, is new director of the Ottawa County Health Department. Both appointments were effective April 15.

Larry E. Jennings, MD, Jackson,
was presented a Liberty Bell Award as a highlight of Law Day activities May 1 of the Jackson County Bar Association, the Bar Auxiliary and the Kiwanis Club of Jackson. Doctor Jennings is medical consultant with the Bureau of Social Aid and medical advisor for the Jackson County Medical Assistance Society. He has organized a medical program for the children at the local Youth Home, which has received special recognition from the State Examiner of Institutions.

Robert J. Mason, MD, Birmingham,
1969-70 MSMS president, has been elected to fill a two-year term with the Michigan Blue Cross Board of Trustees. He is completing the term of retiring veteran medical member of the board, William S. Reveno, MD, the only original member of the board founded in 1939. Reappointed to the board is Herbert W. Harris, MD, Lansing.

Robert D. McIntosh, MD, Detroit,
is new medical director of Chrysler Corporation. He joined Chrysler in February, 1970, as chief of occupational medical services in the Medical Services Department.

James P. Muldoon, MD, Grand Rapids,
was the subject recently for a *Grand Rapids Press* cartoon salute entitled "Today's VIP." The meet-Muldoon article told about his work as president of the Michigan State Proctologic Society and the Kent County Medical Society.

Richard D. Nichols, MD, Ann Arbor,
is new chairman of the Department of Otolaryngology at Henry Ford Hospital, with which he has been affiliated since 1967. He is clinical assistant professor in the Department of Otorhinolaryngology at the UOM.

Frank R. Schultz, MD, Chesaning,
was the subject of a feature story in the Chesaning *Argus* on the marking of his 25th year of

service to his community. Doctor Schultz was praised as "a man who truly gives his life for others without counting the time and effort."

Robert Shanahan, MD, Petoskey,
is continuing his illustrious, part-time musical career as a trumpeter and trombonist with the Epsilon Jass Band of Petoskey. The band performs every Tuesday night at This Ole House in Petoskey and during the summer months at special events in northern Michigan communities and other Great Lakes states. Doctor Shanahan is recognized as one of the country's ragtime jazz greats and has been playing with top U.S. instrumentalists since his college days at the University of Michigan.

Emanuel Tanay, MD, Detroit,
was one of three men to present papers in a special session on homicide prevention May 5 at the annual meeting of the American Psychiatric Association in Washington, D.C. Doctor Tanay is associate professor of psychiatry and law at Wayne State University.

Two Michigan physicians
have been re-elected to the board of directors of Parke-Davis Corp. They are Austin Smith, MD, chairman of the board and chief executive officer, and Joseph F. Sadusk, Jr., MD, group vice president for medical and scientific affairs.

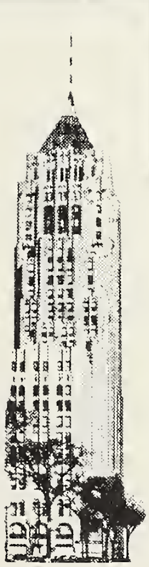
Peter A. Ward, MD,
chief of the Armed Forces Institute of Pathology, Immunology Branch, Washington, D.C., and a former member of the University of Michigan hospital staff, is the recipient of the 15th annual Parke-Davis Award of the American Society of Experimental Pathology. He was cited for his work on the control of leukocyte migration.

Robert E. Weinstock, MD, Detroit,
has been appointed by Gov. William Milliken to the State Board of Registration in Podiatry. His appointment must be confirmed yet by the Michigan Senate.

A. L. Ziliak, MD, Bay City,
received the principal award at Bay City Mercy Hospital honor services recently. Doctor Ziliak was recognized for his 40 years of service to the hospital and community.

PERFECT
MAKES
PRACTICE.

And "perfect" is what the Fisher Building offers a professional practice: Unmatched office facilities; indoor parking contiguous to your office; a location that's easy for you and your patients to reach from the entire metropolitan area. You're near the many specialists in the profession, as well as labs and hospitals, making internal referrals most practical for both patient and physician. Near, of course, to shops and restaurants, to a bookstore and banks and a post office, and the magnificent Fisher stage. It's an atmosphere to accomplish things in. Call us now for diagnosis and consultation on your office needs. As our patient you will find your office problems cured!



THE FISHER BUILDING
Across from General Motors Building
Detroit 48202 • Phone 874-4444

Ulcer
Re-
lief!

Dicarbosil®
ANTACID

Your ulcer patients and others will respond favorably to it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

ARCH LABORATORIES
319 South Fourth Street, St. Louis, Missouri 63102

Here's latest information about licensing of Michigan doctors of medicine

By Herbert A. Auer, Manager
MSMS Dept. of Communications

Following are some Michigan figures about the examination and licensing of doctors of medicine and osteopaths from the recently-published "Medical Licensure Statistics for 1969" published by the AMA: (All the comparable 1970 statistics are not yet available)

* * *

Following are figures re licenses issued in 1969 in Michigan:

	Examinations	Reciprocity	Total
Michigan MDs	449	250	699
Michigan DOs	10	148	158

The Michigan total of 699 for doctors of medicine is the tenth highest in the nation. California led with 3,299, followed in order by New York, Pennsylvania, Florida, Texas, New Jersey, Massachusetts, Ohio, Maryland, Illinois, and Michigan.

* * *

The Michigan total of 158 osteopathic licenses issued is the third highest. Florida leads with 350, followed by Missouri and then Michigan. Of the 777 osteopathic examinations given in the USA in 1969, 280 were taken in Missouri, 272 in Florida, 84 in Kentucky, and 53 in Pennsylvania. The other 29 states issuing osteopathic licenses examined only 88. Of the 34 boards issuing osteopathic licenses in 1969, 20 are composite medical and osteopathic boards.

* * *

The University of Michigan had the second highest number of graduates take the MD examination in 1969. The University of Iowa led the field with 261 graduates to be examined, followed by Michigan with 218 and Indiana with 205. All other states had less than 200.

* * *

Of the 473 who took the MD exam in Michigan in 1969, 449 passed for 94.9 per cent. Among the larger states, high failure rates were reported for California, Indiana, Maryland and New York. In Michigan, if an applicant fails one portion of the examination, he may take that one part over in six months; if he fails more than one part, he must take it all over.

Michigan in 1969 examined 143 graduates of foreign medical schools and 122 passed for 85.3 per cent. Ten states in 1969 examined more foreign students than Michigan. Seventy foreign medical students who were not previously licensed in the United States passed the examination in Michigan and thus were added to the medical profession. It is reported that virtually all of the 24 medical students trained in American colleges who failed to pass the Michigan examination in 1969 have now passed and been licensed in Michigan or some other state. Many of the 21 foreign-trained students who failed the Michigan exam in 1969 also have been licensed in Michigan or by other states.

* * *

More physicians from Michigan than any other state received licenses in California. Of the 1,134 physicians licensed by California on the basis of credentials earned in other states, 126 were from Michigan, 95 from Ohio, 71 from Indiana, 70 from Minnesota, 68 from Missouri and 68 also from Texas. Other migratory patterns reflected in licenses issued by endorsement of credentials show Michigan physicians going to Massachusetts in some large numbers, more so than any other Michigan pattern except Michigan-to-California.

* * *

During 1969, Florida, Michigan and the District of Columbia experienced substantial increases in newly-licensed physician population—the three issued 358 more licenses to physicians having no previous license than in the previous year.

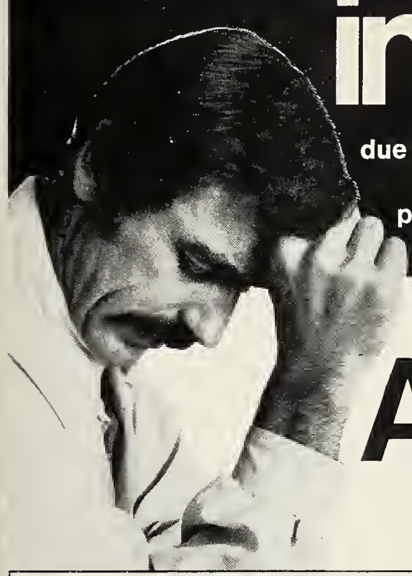
New York for many years continued to issue more first licenses in 1969 than any other state (1,318); followed by California, Pennsylvania and Michigan.

* * *

Michigan, which is the 6th most populous state, ranks 35th in the number of freshmen medical students per 100,000 population, according to the U.S. Department of Commerce. The statistics, the most recent available, are for 1969-70 school year. Michigan had 366 entering freshmen medical students, for 4.2 per 100,000 population. The 366 freshmen students is the eighth largest in the nation, but many smaller states have a much better ratio than Michigan of incoming medical students to the population.

* * *

Academicians report there should be a good relationship between the number of bachelor's degrees awarded in the state to the number of freshmen medical students. In this category, Michigan also rates poorly. Michigan colleges in 1967-68 awarded 27,364 bachelor's degrees to rank seventh in the nation; but the ratio of entering freshmen medical students per 1,000 bachelor's degrees ranked 32nd in the nation. The figure was 13 freshmen medical students per 1,000 bachelor's degrees.



The treatment of

impotence

due to androgenic deficiency in the American male. The concept of chemotherapy plus the physician's psychological support is confirmed as effective therapy.

NEW CLINICAL STUDY

The Treatment of Impotence
with Methyltestosterone Thyroid
(100 patients—Double Blind Study)
T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the
American Fertility Society

Android®
(thyroid-androgen) tablets

Double-Blind Study and Type of Patient: 100 patients suffering from impotence. Of the patients receiving the active medication (Android) a favourable response was seen in 78%. This compares with 40% on placebo. Although psychotherapy is indicated in patients suffering from functional impotence the concomitant role of chemotherapy (Android) cannot be disputed.

Choice of 4 strengths:

Android

Each yellow tablet contains:

Methyl Testosterone	2.5 mg.
Thyroid Ext. (1/6 gr.)	10 mg.
Glutamic Acid	50 mg.
Thiamine HCL	10 mg.

Dose: 1 tablet 3 times daily.
Available:
Bottles of 100, 500, 1000.

REFER TO PDR

Android-HP
HIGH POTENCY

Each red tablet contains:

Methyl Testosterone	5.0 mg.
Thyroid Ext. (½ gr.)	30 mg.
Glutamic Acid	50 mg.
Thiamine HCL	10 mg.

Dose: 1 tablet 3 times daily.
Available:
Bottles of 100, 500, 1000.

Android-X
EXTRA HIGH POTENCY

Each orange tablet contains:

Methyl Testosterone	12.5 mg.
Thyroid Ext. (1 gr.)	64 mg.
Glutamic Acid	50 mg.
Thiamine HCL	10 mg.

Dose: 1 or 2 tablets daily.
Available:
Bottles of 60, 500.

Android-Plus
WITH HIGH POTENCY
B-COMPLEX AND VITAMIN C

Each white tablet contains:

Methyl Testosterone	2.5 mg.
Thyroid Ext. (¼ gr.)	15 mg.
Ascorbic Acid (Vit. C)	250 mg.
Thiamine HCL	25 mg.
Glutamic Acid	100 mg.
Pyridoxine HCL	5 mg.
Niacinamide	75 mg.
Calcium Pantothenate	10 mg.
Vitamin B-12	2.5 mcg.
Riboflavin	5 mg.

Dose: 2 tablets daily.
Available: Bottles of 60, 500.

Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

Refarances: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

Write for literature and samples: BROWN **THE BROWN PHARMACEUTICAL CO., INC.** 2500 West 6th Street, Los Angeles, California 90057

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road
Conducted by Sisters of Mercy
Ann Arbor, Michigan
Telephone — 313 663-8571

Mercywood Mercy

Mercywood Hospital is a private neuropsychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multi-disciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs

PSYCHIATRIC STAFF

Lyle M. Allis, M.D.
Robert J. Bahra, M.D.
Dean P. Carron, M.D.
Francis M. Daignault, M.D.
Gordon C. Dieterich, M.D.
James R. Driver, M.D.
Alexander P. Dukay, M.D.
Robert L. Fransway, M.D.
Stuart M. Gould, Jr., M.D.
Leonard E. Himler, M.D.*
Sydney Joseph, M.D.
Hubert Miller, M.D.
Jacob J. Miller, M.D.
Rudolf Nobel, M.D.
Gerard M. Schmit, M.D.
Prehlad S. Vachher, M.D.
Richard D. Watkins, M.D.

*1904-1967

County societies

Ingham doctors contact county societies in Medicaid campaign

The Ingham County Medical Society has started a concerted campaign to raise physicians' Medicaid fees and to establish a fixed fee schedule tied to a cost of living raise for the future.

Two resolutions to that effect were passed at a special meeting called by the county society on May 6. Copies of the resolution calling for the raise in physicians' fees were mailed to all county medical society presidents while the fixed fee schedule proposal was sent to county presidents; Bernard Houston, Director of the Michigan Department of Social Services, and John McCabe, Blue Shield president.

The county society's delegates to the MSMS annual meeting plan to propose the resolution for the fixed fee schedule at the meeting Oct. 3-5 in Grand Rapids, according to John Kantner, Ingham executive secretary.

The MSMS Committee on Governmental Care Programs is studying both resolutions as they relate to the committee's investigation on improving the Medicaid program.

Through their first resolution, the Ingham doctors are asking their colleagues throughout Michigan to work for reversing cuts the state made in Medicaid payments so physicians would receive prevailing 1971 charges for service. Future adjustments, the Ingham physicians have agreed, should be on the basis of a fixed fee scheduled for all services and procedures.

Newaygo auxiliary informs 350 students of health careers

About 350 students, counselors and resource people attended the recent "Health Careers Expo" sponsored by the Newaygo County Medical Society auxiliary and Gerber Memorial Hospital in Fremont. Twenty-five resource persons manned booths where area junior and senior high school students learned about the careers of nursing, anesthesia, dietetics, pharmacy, laboratory technology, X-ray technology, medical secretaryship, dentistry, medicine and dental hygiene.

Kent doctors develop school-camp exam forms

Members of the Kent County Medical Society's Physical Fitness Committee have developed a Health Appraisal Form to be used wherever possible for health examinations required by the school systems and camps in the area.

The form was developed in cooperation with the Kent County Association of Osteopathic Physicians, the Dental Society and with the Kent Intermediate and Grand Rapids Public Schools.

Jackson doctors' goal: $65,000 for drug control

A goal of $65,000 for drug control programs has been set by the Jackson County Medical Society, the Jackson-Hillsdale County PA54 Community Health Services Board and the Jackson Area Drug Abuse Council. The three have entered into an agreement to conduct a coordinated community fund drive to develop a comprehensive drug abuse control program. The medical society's aim would be to provide laboratory equipment for diagnosis and treatment of drug abuse.

Kent doctors' desire for GVSC nursing program nearly realized

Five years ago the Kent County Medical Society and the Grand Rapids District Nurses Association asked that nearby Grand Valley State College develop a baccalaureate degree program in nursing. Late in April, such a degree program was given unanimous support of West Michigan health care professionals at a public hearing on nursing needs in Michigan held in Grand Rapids.

Still needed was a go-ahead from the State Board of Education, a decision expected by July. A planning committee has recommended establishment of another baccalaureate program for nurses in the state by the fall of 1973 or 1974. Western Michigan is suggested as one of two possible locations; the other is southeastern Michigan.

New tri-county CHP Council has doctor-representatives

The Genesee, Lapeer and Shiawassee County Medical Societies are all represented on the new Genesee, Lapeer and Shiawassee Comprehensive Health Planning Council which was officially organized early in April. The new council has a 57-member board, representing 290 providers of service, governmental agencies and consumer organizations.

(Continued on Page 672)

The girth control pill

Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic *cardiovascular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-107/4/71/U.S. PATENT NO. 3,001,910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

Painful night leg cramps...

unwelcome bedfellow for any patient—including those with arthritis, diabetes or PVD

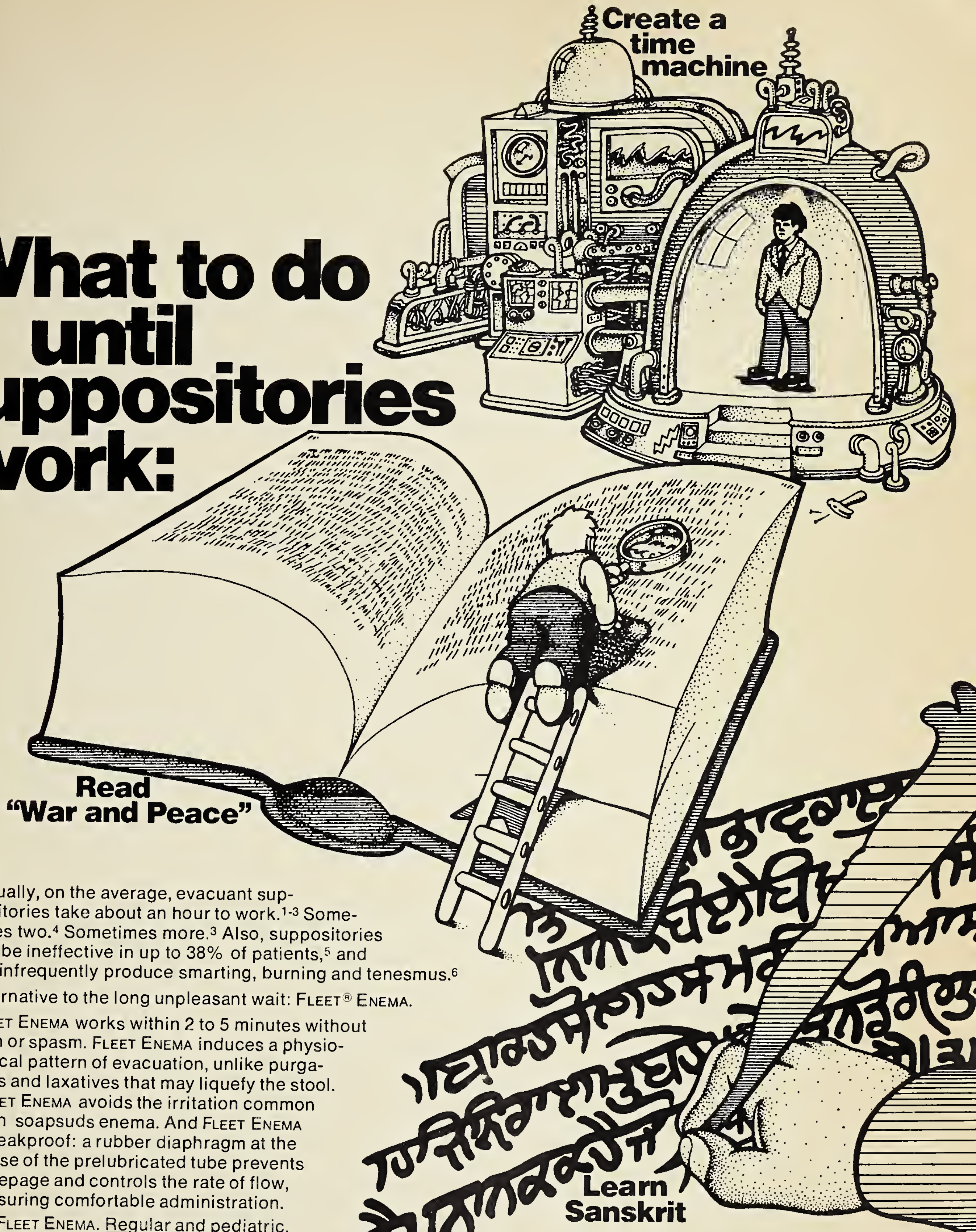
One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

Quinamm™ Specific therapy for night leg cramps
(quinine sulfate 260 mg., aminophylline 195 mg.)

What to do until suppositories work:

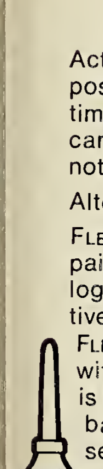


Actually, on the average, evacuant suppositories take about an hour to work.[1-3] Sometimes two.[4] Sometimes more.[3] Also, suppositories can be ineffective in up to 38% of patients,[5] and not infrequently produce smarting, burning and tenesmus.[6]

Alternative to the long unpleasant wait: Fleet® Enema.

Fleet Enema works within 2 to 5 minutes without pain or spasm. Fleet Enema induces a physiological pattern of evacuation, unlike purgatives and laxatives that may liquefy the stool. Fleet Enema avoids the irritation common with soapsuds enema. And Fleet Enema is leakproof: a rubber diaphragm at the base of the prelubricated tube prevents seepage and controls the rate of flow, assuring comfortable administration.

Fleet Enema. Regular and pediatric. Both completely disposable—like suppositories, only better. Much better.



C. B. FLEET CO., INC.
Lynchburg, Va. 24505

Fleet
pharmaceuticals

Warning: Frequent or prolonged use of enemas may result in dependence. Take only when needed or when prescribed by a physician. Do not use when nausea, vomiting or abdominal pain is present.
Caution: Do not administer to children under two years of age unless directed by a physician.

References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964.

When irritable colon feels like this

...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

☐ **belladonna alkaloids—for the hyperactive bowel**
☐ **simethicone—for accompanying distension and pain due to gas**
☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.

Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.

Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.

Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.

Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®
antispasmodic/sedative/antiflatulent

Spring peeper (tree frog, *Hyla crucifer*):
this small amphibian can expand
its throat membrane with air until it is
twice the size of its head.

Here is the form for entering Doctors', Wives' Art Show

WHEN—October 5 through October 7, 1971, during the annual convention of the Woman's Auxiliary to the Michigan State Medical Society held in conjunction with the MSMS Meeting.

WHERE—Civic Auditorium, Grand Rapids, Michigan.

WHO MAY ENTER—Any Michigan doctor and/or his wife.

CATEGORIES—Paintings—oil, polymer, lacquer, water, tempera
Sculpture—wood, stone, ceramic, metal
Ceramics
Drawing and graphic arts—all print techniques
Three dimensional design—weaving, tapestry, jewelry
Photography

(All entries must be of original design.)

ENTRY BLANK

DEADLINE: September 27, 1971

Name________________________________
Last Name First Name

Address________________________________
Street City Zip Code

1. Title______________________ Price__________

Medium______________ Check here if NFS__________

2. Title______________________ Price__________

Medium______________ Check here if NFS__________

3. Title______________________ Price__________

Medium______________ Check here if NFS__________

4. Title______________________ Price__________

Medium______________ Check here if NFS__________

Send to:
Mrs. William E. Sprague, Art Show Co-Chairman
2324 Ducoma Drive, N.W.
Grand Rapids, Michigan 49504

THE FINEST NAME IN MEDICAL - DENTAL ARTS

THE DAVID WHITNEY BUILDING

WOODWARD AT GRAND CIRCUS PARK AND WASHINGTON BOULEVARD

IMMEDIATE OCCUPANCY • VARIOUS SIZE SUITES AVAILABLE

THE DAVID WHITNEY BUILDING CONTAINS DETROIT'S FINEST MEDICAL, DENTAL AND X-RAY LABORATORIES PLUS A PHARMACY FOR YOUR CONVENIENCE, LOCATED MINUTES FROM THE NEW DETROIT MEDICAL CENTER. • AUTOMATIC ELEVATORS • BARBER SHOP • SNACK SHOP • BANK • COMPLETE BUILDING SECURITY • FINEST PERSONALIZED JANITORIAL AND MAINTENANCE INCLUDED • ADJACENT TO LARGE PARKING GARAGE • SPECIAL RATES TO NEW DOCTORS

hayman management company 962-3058

Michigan Authors

Articles

Raul A. Gutman, MD; Norman R. Lazarus, MD, PhD; Juan C. Penhos, MD; Stefan Fajans, MD, and Lillian Recant, MD, Ann Arbor, "Circulating Proinsulin-like material in patients with functioning insulinomas," page 1003, *New England Journal of Medicine,* May 6, 1971.

Richard L. Collier, MD; John H. Wylie, Jr., MD, Okemos, and Jorge Gomez, MD, Barnwell, S.C., "Toxic Megacolon," page 283, *American Journal of Surgery,* March, 1971.

C. E. Schorer, MD, Detroit, "Ice Chewing," a letter, page 1352, *Journal of the American Medical Association,* May 24, 1971.

F. B. Fralick, MD, Ann Arbor, "Recurrent Iritis after Cataract Extraction," Questions and Answers, page 1359, *Journal of the American Medical Association,* May 24, 1971.

Richard C. Bates, MD, Lansing, "Is the FDA promoting pollution hysteria?" page 200, *Medical Economics,* May 10, 1971.

Cyrus Farrehi, Grand Blanc, "Stimulation of the Carotid Sinus Nerve in Treatment of Angina Pectoris," page 759, *American Heart Journal,* December, 1970; "Hemodynamic Studies in Patients with Cloth-Covered Composite-Seat Starr-Edwards Valve Prostheses," page 879, *The Journal of Thoracic and Cardiovascular Surgery,* December, 1970.

W. F. C. Duvernoy, MD, Detroit, "Amphetamine Effects," a letter, page 1987, *Journal of the American Medical Association,* March 22, 1971.

Thomas B. Eyl, MD, St. Clair, "Current Concepts: Organic-Mercury Food Poisoning," Medical Intelligence section, page 706, *New England Journal of Medicine,* April 1, 1971.

W. H. Beierwaltes, MD; L.M. Leiberman, MD, PhD; A. N. Ansari, MD, and Hiroshi Nishiyama, MD, Ann Arbor, "Scintillation Scanning for Adrenal Glands," page 275, *Journal of the American Medical Association,* April 12, 1971.

Lewis E. Simoni, MD, Flint, "A Physician's View of Hospital Effectiveness," page 4, *Michigan Hospitals,* March, 1971.

William G. Birch, MD, Battle Creek, "The Physician's Assistant Concept and its Relation to Nursing," page 6, *Michigan Hospitals,* March, 1971.

W. Victor Bielinski, MD, Midland, et al, "Management Program Department heads learn management skills and help orient students in health careers in a joint hospital-college program," page 73, *Hospitals,* April 16, 1971.

S. H. Schuman, MD, DrPH, Ann Arbor, "Drug Perception and the Student-Teacher Gap," page 659, *Journal of the American Medical Association,* April 26, 1971.

Books Published

Lafayette Clinic Studies on Schizophrenia, edited by **Garfield Tourney, MD, and Jacques S. Gottlieb, MD, Detroit,** Wayne State University Press, Detroit, 48202, 532 pages, $19.95.

Human Tumors, by **Pierre Masson, MD,** translated by **Sidney D. Kobernick, MD,** Wayne State University Press, Detroit, 48202, 1,360 pages, $45.00.

Did you see . . .

the June issue of **Michigan Medicine**? If you did, you read about "turning on" practicing community physicians to self-instructional, audio-visual teaching aids; the new MSMS Placental Tissue Registry in operation at MSU; and the complete copy of Peer Review Guidelines approved by The MSMS Council.

If you didn't see the June issue, you missed all these things. Go back and read them now.

SOME PHYSICIANS KNOW what to do with their patients who are alcoholics or problem drinkers.

SOME PHYSICIANS WISH they knew what to do with them.

Have you thought of the Alcoholism Services of the Battle Creek Sanitarium Hospital? Since 1965 we have maintained an enviable record in the rehabilitation of the alcoholic or problem drinker.

A full range of services and specialties.

Give us a call
616-964-7121 Ext. 588 or 589

Battle Creek Sanitarium and Hospital
197 N. Washington Avenue
Battle Creek, Michigan 49016

Kalamazoo Academy to be represented on board of new center

The Kalamazoo Academy of Medicine has two members, Tom Reigle, MD, and Donald May, MD, on the board of directors of the new Neighborhood Family Health Center to be established on the low-income north side of Kalamazoo.

The Academy officially endorsed the concept of the center at its March meeting, after several months of study. The center was recommended initially at the November Academy meeting after a health, welfare and recreation study of the county showed a need. Interested physicians joined with other community leaders to gain backing for the center.

Macomb physicians honor local legislator

Members of the Macomb County Medical Society presented an award to Rep. Joseph Snyder, (D-St. Clair Shores) for his contribution to health work in their county. The occasion was the annual legislative night of the county medical society.

Kent promotes services

The Kent County Medical Society is one of three original organization-members of a new Kent County Government Action Council. The Council is seen as a "citizens' vehicle" for promoting better government services as a means of improving the social welfare.

Ottawa offers information

Operations of the MSMS Department of Economics and the Bureau of Economic Information were described by Richard Campau, department manager, at the Ottawa County Medical Society meeting recently.

Wayne delegation to MSMS House same as in 1970

The Wayne County Medical Society delegates to the MSMS House met again for the second time June 8, to draw up resolutions. Due to the change in Wayne County elections from spring to fall, the same delegates and delegate committees are being continued from the 1970 House meeting through the 1971 House meeting.

The leaders of the Wayne delegation will be James C. Danforth, Jr., MD, chairman; Robert K. Whiteley, MD, vice chairman, and Ned I. Chalet, MD, secretary.

Pre-Sate® (chlorphentermine hydrochloride)

Caution: Federal law prohibits dispensing without prescription.

Indications

Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications

Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings

When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children Not recommended for use in children under 12 years of age.

Precautions

In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions

Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration

The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage

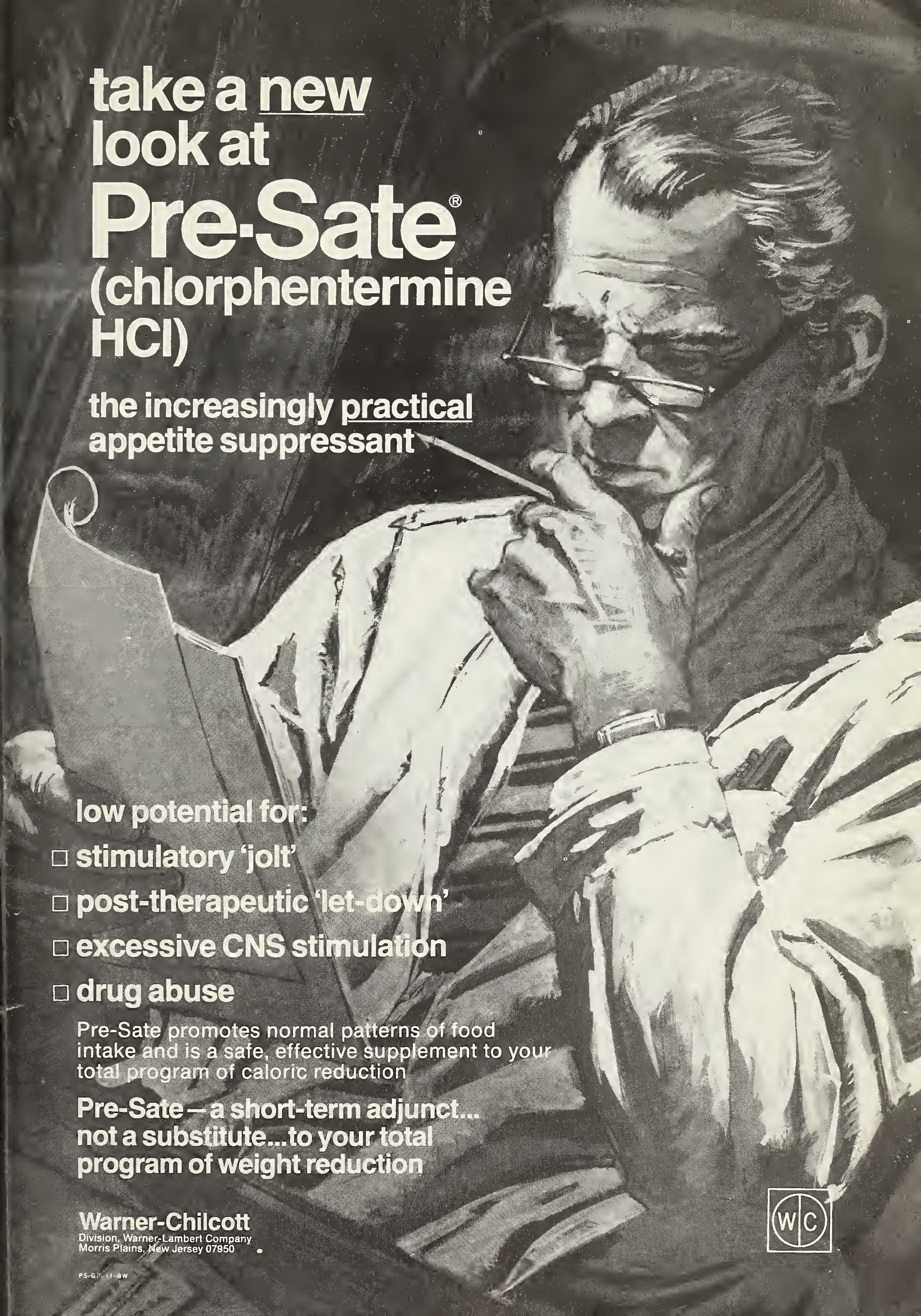
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied

Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information is available on request.



take a new look at Pre-Sate® (chlorphentermine HCl)

the increasingly practical appetite suppressant

low potential for:

☐ stimulatory 'jolt'
☐ post-therapeutic 'let-down'
☐ excessive CNS stimulation
☐ drug abuse

Pre-Sate promotes normal patterns of food intake and is a safe, effective supplement to your total program of caloric reduction

Pre-Sate – a short-term adjunct... not a substitute...to your total program of weight reduction

Warner-Chilcott
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

W C

PS-GP 11-BW

In memoriam

Robert L. Novy, MD
Detroit

Doctor Novy

President of Michigan Medical Service for 13 years and past president of the Michigan State Medical Society, Robert L. Novy, MD, died May 5 at the age of 79.

Doctor Novy, who was honored by MSMS in 1962 with a Certificate of Commendation, was also a former member of the Detroit Board of Health, a past president of the Detroit Academy of Medicine, a former trustee of the Michigan Hospital Service and a former professor of medicine at Wayne State University.

When the MSMS award was made in 1962, it recognized Doctor Novy for "his distinguished leadership to state and national Blue Shield Plans," and for being "an outstanding medical statesman in his county, state and national medical societies."

The Wayne County Medical Society presented him with a Distinguished Service Citation in 1962, primarily for his pioneer work with voluntary prepayment plans. Doctor Novy was known as one of the foremost articulate spokesmen for prepayment health.

He was elected to the Blue Shield Board of Directors in 1941 without his knowledge, and over his objections, when the plan was $500,000 in debt with only $2,000 in the bank.

Doctor Novy also served as a member of the AMA Council on Medical Service, as vice president of the Blue Shield Medical Care Plan and the National Coordinating Body for Blue Shield Plans.

He was a graduate of the University of Michigan Medical School, where his father was dean. Doctor Novy was an internist and cardiologist, and former chief of cardiology at Harper Hospital.

He was chairman of the WCMS Board of Trustees, delegate to the MSMS House of Delegates from 1937-1961, delegate to the AMA for 16 years and a member of the Detroit Board of Health for 22 years.

Frederick W. Bald, MD
Flint

A Flint physician for more than 40 years, Frederick W. Bald, MD, died April 26 at the age of 69.

Doctor Bald, an obstetrician-gynecologist, was a former member of the MSMS Cancer Control Committee and the MSMS Maternal Health Committee. He was a founding member of the American College of Surgeons and was a diplomate of the American Board of Obstetrics.

A graduate of the University of Michigan Medical School, Doctor Bald was a former instructor there. He was on the staffs of St. Joseph, McLaren General and Hurley Hospitals in Flint, and was a member of the Michigan Society of Obstetricians and Gynecologists, the Flint Academy of Surgery, the American Association for Infant and Maternal Health and the Norman F. Miller Gynecologic Society.

He was a former medical chairman of the Genesee County Unit of the American Cancer Society and director of the Michigan Division of the American Cancer Society. He was a brother of the late F. Clever Bald, PhD, historian and professor emeritus of the Michigan Historical Collections.

John H. Besancon, MD
Detroit

Retired Detroit dermatologist John H. Besancon, MD, died May 24 at the age of 69.

Doctor Besancon, who had practiced 40 years, was affiliated with Harper Hospital and Crittenton Hospital in Detroit. He was a member of the Detroit Dermatological Society and the American Academy of Dermatology.

Doctor Besancon was graduated from the University of Michigan Medical School.

R. John Hardstaff, MD
Grosse Pointe

R. John Hardstaff, MD, Grosse Pointe, died May 24 at the age of 86. A retired otorhinolaryngologist, Doctor Hardstaff had been affiliated with Harper Hospital, Detroit. He was a graduate of George Washington University Medical School and the Toronto Facility of Medicine and was a fellow of the Royal Australian College of Surgeons.

Doctor Hardstaff had served in the China-British Foreign Service.

Donald K. Hibbs, MD
Battle Creek

Donald K. Hibbs, MD, medical director of the Battle Creek American Legion Hospital since 1962, died May 5 at the age of 71.

Doctor Hibbs was a graduate of Rush Medical School and had specialized in urology before being appointed to Legion Hospital. He was a retired captain in the Naval Reserve.

Doctor Hibbs was affiliated with Battle Creek Health Center and Community and Leila Post hospitals in Battle Creek. He was a vice president of the Calhoun County Medical Society and had belonged to the MSMS Venereal Disease Committee.

He belonged to the American College of Surgeons, was certified by the American Board of Urology, and was a member of the American Venereal Disease Association, the American Urology Association and The Detroit Urology Society.

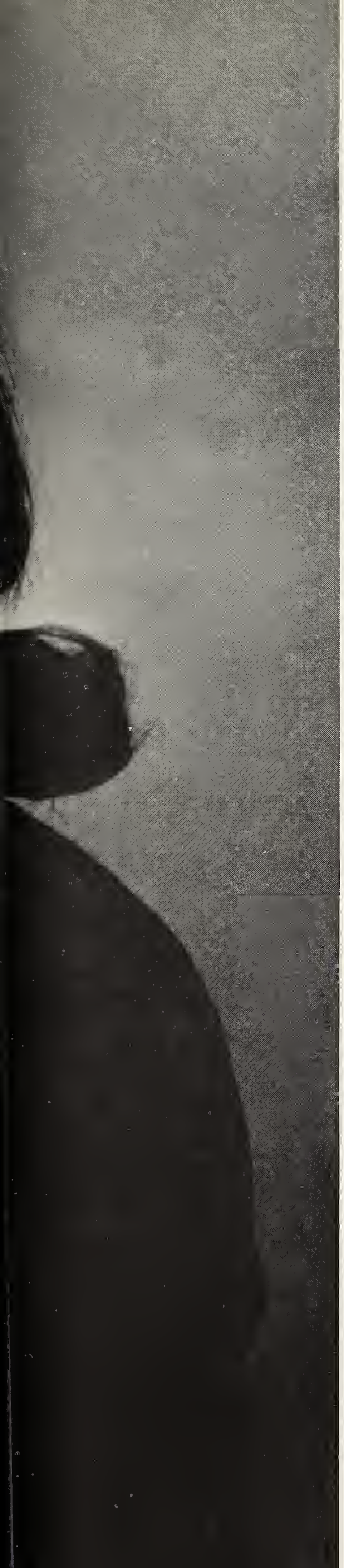
The new C.S. Mott Center for Human Growth in the Detroit Medical Center will look like the architect's model above at its completion early in 1973. Groundbreaking was begun early in May on the site near Hutzel Hospital. The $4.5 million for its construction was provided by the Mott Foundation fo Flint in the largest grant ever presented to Wayne State University by a non-government source. The center will be used as a center for study of birth defects, for aiding afflicted children and their parents, as a research center for population control and for training of medical students and physicians.

Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction
THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA
Professional Protection Exclusively since 1899

DETROIT OFFICE: R. K. Wind, J. K. Galloway and D. J. Anton, Representatives
27200 Lahser Road, Southfield 48076, Telephone: (Area Code 313) ELgin 3-4848 or 444-1439

GRAND RAPIDS OFFICE: G. J. Haworth, Representative
422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477

In the glaucoma patient
on cerebral or peripheral
vasodilator therapy
no treatment
conflict
reported



VASODĪLAN®

(ISOXSUPRINE HCl)

the compatible vasodilator

- no reported increase of intraocular pressure.
- conflicts have not been reported with diuretics, corticosteroids, antihypertensives or miotics.
- complications in the treatment of coronary insufficiency, hypertension, diabetes, peptic ulcer or liver disease have not been reported.

In fact, there are no known contraindications in recommended oral doses other than it should not be given in the presence of frank arterial bleeding or immediately postpartum.

Although not all clinicians agree on the value of vasodilators in vascular disease, several investigators[1-4] have reported favorably on the effects of isoxsuprine. Effects have been demonstrated both by objective measurement[2,4] and observation of clinical improvement.[1,3] **Indications:** Cerebrovascular insufficiency, arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). **Composition:** VASODĪLAN tablets, isoxsuprine HCl 10 mg. and 20 mg. **Dosage:** Oral—10 to 20 mg. t.i.d. or q.i.d. **Contraindications and Cautions:** There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of arterial bleeding. **Side Effects:** Occasional palpitation and dizziness can usually be controlled by dosage reduction. Complete details available in product brochure from Mead Johnson Laboratories. **References:** 1. Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960. 2. Horton, G. E., and Johnson, P. C., Jr.: Angiology *15*:70-74 (Feb.) 1964. 3. Dhrymiotis, A. D., and Whittier, J. R.: Curr. Ther. Res. *4*:124-128 (April) 1962. 4. Whittier, J. R.: Angiology *15*:82-87 (Feb.) 1964.

Mead Johnson
LABORATORIES

© 1971 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U.S.A. 184571

Classified Advertising

$5.00 per insertion of 50 words or less, with an additional 10 cents per word in excess of 50.

GENERAL PRACTITIONERS—Community of Mt. Pleasant, Michigan desirous of securing 4 general practitioners. Good hospital privileges available. 125 bed, fully accredited. Excellent consultants available in community. Mixed M.D., D.O. Staff. Active staff of 28 physicians. Community of 22,000. Site of Central Michigan University, 14,500 students. Four season area. Metropolitan areas within 50 miles. Service area of 75,000. Five G.P.'s in active practice. Community will assist actively in helping you get established. Call collect R. E. Pieratt, Adm. (517) 773-7941 or Frank Johnson, M.D., Chairman Recruitment Committee, area (517) 772-4846.

RADIOLOGY LOCUMS WANTED—Board Certified Radiologist, Univ. trained, including arteriography and isotopes, Michigan licensed, presently Fellow at Toronto Hospital for Sick Children, desires summer 1 week locums (or 2 if resort area where family might vacation). Call Dr. C. Fitz (416) 922-0928.

RADIOLOGIST Board Certified desires to practice in northern Michigan below the upper peninsula. Prefer solo practice but will consider all opportunities. Send replies to Box #6, 120 W. Saginaw Street, East Lansing, Michigan 48823.

INTERNIST—under 40. To take over large independent practice in lovely northern (lower peninsula) Michigan community. Excellent office and hospital facilities. Address: Box 5, 120 W. Saginaw Street, East Lansing, Michigan 48823.

URGENTLY NEED INTERNIST and/or cardiologist to establish practice in area due to death of a local physician. Come to Dowagiac, Cass County, with 182 lakes, ideally located in Southwestern Michigan, anly 2 hours from Chicago and half an hour from South Bend, Indiana. Only accredited hospital in Cass County. 60 beds, ICU-CCU units. Early expansion to 100 beds is planned. Town of 8,000. Fishing, swimming, excellent environment for children, with Junior College. Direct all responses to Robert O'Keefe, Administrator, or call collect (616) 782-7532. Lee Memorial Hospital, Dowagiac, Michigan 49047.

EMERGENCY ROOM PHYSICIAN: Position available with ten man professional corporation, modified Pontiac Plan. Salary open with available stockholder arrangement. Contact D. Landron, M.D., "Jackson Doctors Emergency Service, PC", W. A. Foote Memorial Hospital, 205 N. East Avenue, Jackson, Michigan 49201.

Advertisers in MICHIGAN MEDICINE are friends of the profession. By accepting their advertising we show confidence in them, their services and products. They help make the journal a quality publication. Please familiarize yourself with their services and products and let them know that you see their advertising in MICHIGAN MEDICINE.

YOUR OPINION PLEASE/Continued

studies of new drugs required by the Food and Drug Administration force pharmaceutical firms to spend far more money to market a new drug and thus increase the cost of all drugs to the consumer. Similarly, the delays in releasing effective new drugs, as well as discouraging the development of better remedies, has hurt the public in the long run.

The failure of legislatures to provide adequate legal safeguards has discouraged many physicians from accepting the concept of physician assistants.

Where state or local budgets have been crimped (and this probably is true of most areas in this country), only medical services have been cut back. Obviously those individuals for whom the delivery of health care has been minimal are most affected; thus, they receive even less care, and frequently this results in more serious and costly illness. Programs of proven effectiveness, providing quality care at lower cost, in Connecticut and California, for example, worked out and implemented by the state medical societies, have been thrown aside by state legislatures.

In summary, by and large the medical profession has been innovative and realistic in attempting to correct inefficiencies in the present methods of financing and delivery of health care. The government has been repressive and stifling; private industry has not been interested since there is generally little money to be made in this area. Because our previous political and socio-economic activity (or inactivity) has saddled us with a poor public image, both government and private industry have been able to make us their scapegoat.

Our major goal should be to induce reforms in the attitudes of government and private industry and to induce them to experiment with some of the approaches that we have suggested.

The PM Group

PROFESSIONAL MANAGEMENT FOR PHYSICIANS AND DENTISTS

since 1932

Professional Management Offices
In These Cities .....

ANN ARBOR, BATTLE CREEK, BERKLEY, DETROIT,
FLINT, GRAND RAPIDS, KALAMAZOO, LANSING,
MUSKEGON, SAGINAW AND TRAVERSE CITY.

Black and Skaggs Associates
PM Systems, Incorporated

181 North Avenue PM BUILDING Battle Creek, Michigan 49017

HOSPITAL PLANNING INC.
Alco Universal Building
East Lansing, Michigan
48823
517 332-1333

PROFESSIONAL PERSONNEL RECRUITMENT FOR HOSPITALS & CLINICS

Administrators, Physicians, Dept. Heads

PHYSICIANS — ALL SPECIALTIES

At no financial obligation, let us present your resume to our clients. As Planning & Personnel Consultants, we serve fine Hospitals, Clinics, Universities, and Health Planning Agencies in the Great Lakes Region. We advise physician candidates in depth about a variety of the best opportunities available to assist in making the best decisions.

WANTED: INTERNIST-CARDIOLOGIST

Searching for Internist-Cardiologist to join small multi-specialty group in Northern Michigan. Direct new hospital coronary care unit. New office building located next to hospital. Congenial group. Plenty of parking. Enjoy quiet, clean, small town living and practice your specialty. Send resume or call Arthur A. Lepinot.

Index to Advertisers

American Medical Association . . . 631
Arch Laboratories . . . 661
Armour Pharmaceutical Co. . . . 626, 627
Battle Creek Sanitarium . . . 671
Brighton Hospital . . . 639
Bristol Laboratories . . . 659
Brown Pharmaceutical Co. . . . 663
Burroughs-Wellcome & Co. . . . 653
Campbell Soup Co. . . . 621
Classified Advertising . . . 678
David Whitney Bldg. . . . 670
Dow Chemical Co. . . . 656, 657
Fisher Bldg. . . . 661
Fleet, C. B. . . . 667
Flint Laboratories . . . 649, 650, 651, 652
Geigy Pharmaceuticals . . . 590
Homemakers, Inc. . . . Cover III
Hospital Planning, Inc. . . . 679
Import Motors Limited, Inc. . . . 645
Lilly, Eli & Co. . . . 596
Mead Johnson Laboratories . . . 676, 677
Medical Protective Co. . . . 675
Mercywood Hospital . . . 663
Michigan State Medical Society . . . 647
National Drug Co. . . . 629, 630, 665, 666
Professional Management . . . 679
Robins, A. H. Co. . . . 654, 655
Roche Laboratories . . . Cover II, 589, Cover IV
Searle, G. D. Co. . . . 622, 623
Stratton, Ben P. . . . 637
Stuart Pharmaceuticals (Div. of Atlas Ind.) 624, 668, 669
Upjohn Company . . . 592, 593, 640, 641, 642
USV Pharmaceuticals . . . 632, 633
Walker Corp. . . . 634, 635
Warner Chilcott (Div. of Warner Lambert) . . . 672, 673
Willingway, Inc. . . . 680

WILLINGWAY

311 JONES MILL ROAD
STATESBORO, GEORGIA

TELEPHONE
(912) 764-6236

LONG TERM THERAPY OF DRUG DEPENDENCY CONDITIONS

Willingway Hospital is a new facility, the first complete hospital to be constructed under the Georgia Hospital Rules and Regulations, revision of November 24, 1969, authorizing residential type units.

Located at the city limits in east Statesboro on an eleven acre tract of woodland in a quiet, secluded area containing a lake, the single story, multi-level hospital consists of a detoxification section and a residential care section. The detoxification unit is equipped and staffed for the withdrawal treatment of any type of intoxication including alcohol, narcotics, sedatives, tranquilizers and other drugs or combinations.

The residential care unit is composed of 26 private rooms with private baths convenient to a comfortable lounge and arranged to achieve an intimate homelike atmosphere. All living units are individually decorated and furnished. No two are alike. Wall to wall carpet throughout.

There is a large day room, inside and outside patios, a dining room where home cooked meals are served, a library and conference rooms. The building is all electric, completely air conditioned with individual controls, and is protected by a modern sprinkler system in all areas.

Male and female patients are admitted to the detoxification unit for withdrawal. When this phase is completed, they are transferred to the residential care unit for continuation of rehabilitative therapy.

The Willingway treatment program operated successfully at another location in Statesboro for four years before moving to the new facility.

Requirements for admission. To be admitted all new patients must agree to the following:

1. Stay 28 days.
2. No telephone calls.
3. No visitors.
4. No automobiles.
5. Pay for 28-day program at time of admission.

Incoming and outgoing mail is not restricted. Mail is not read or censored. No one is admitted for detoxification only.

For rates and information write to:

WILLINGWAY
P. O. Box 508
Statesboro, Ga. 30458

John Mooney, Jr., M.D.
Medical Director

Mrs. Dorothy R. Mooney
Administrator

Member Georgia Hospital Association

Kent physicians confer each month with their Michigan legislators

Grand Rapids-area legislators are guests of the Kent County Medical Society Legislative Committee at monthly luncheons, except during the summer. The physicians and the lawmakers get to know each other better, and the physicians have an opportunity to make their views known on important medical legislation. The photos on this page are representative of the doctor-lawmaker get-togethers.

Around the luncheon table are, from left, James S. Farnsworth, Plainwell representative; Richard Rasmussen, MD, and Perry Green, MD, legislative committee co-chairman.

Fred Brace, MD, left, chats with Representatives Stanley Powell, Ionia; Stanley Davis and Peter Kok, both of Grand Rapids.

Kent legislative committee co-chairman, Dale Kessler, MD, left, meets with Representatives Jelt Sietsema, Grand Rapids, Mel DeStigter, Hudsonville, and Thomas G. Ford, Sr., Grand Rapids.

Saginaw County Society Sponsors High School Club for Future MDs

A busload of Saginaw-area high school students, all members of the Future Physicians Club sponsored by the Saginaw County Medical Society, embarked recently for Detroit, where they toured the Wayne State University Medical School. Included in their tour were a visit to the department of anatomy and a viewing of a film on the growth of a chick embryo. Each of the students has indicated an interest in a medical career.

Doctor Mason describes some of the anatomical displays on exhibit at the medical school. With him are, from left, Mary Lou Sloboda, Douglas MacArthur High School; Randy DeGeus, St. Charles High School, and Richard Ross and Curtis Bow, both of Bridgeport High School.

Among the tour guides was Dennis Armstrong, foreground, fourth year medical student at Wayne, who distributes copies of the AMA's booklet, **Horizons Unlimited.**

EGE OF MEDICINE

The Saginaw students pose in front of the medical school with their advisor, William Mason, MD, Saginaw, far left, chairman of the Saginaw society's committee sponsoring the club.

Kidney Foundation, MSU Conduct Symposium to Describe New Treatments

Two hundred Michigan doctors heard about new developments in treatment at the Kidney Foundation of Michigan's recent 10th annual symposium in East Lansing.

Co-sponsored by the Kidney Foundation and MSU, the symposium offered concurrent sessions for physicians, nurses, social workers, technicians and dieticians.

Martin F. Jones, M.D., medical director of the E. W. Sparrow Hospital artificial kidney center, Lansing, was chairman of the symposium.

Ready for questions from the audience are panelists Scott Swisher, M.D. (left) and Fred Shapiro, M.D. of the University of Minnesota. Dr. Swisher is professor and chairman, department of medicine, MSU College of Human Medicine.

Directors of hemodialysis centers, Sidney Baskin, M.D., (left) and John C. Peirce, M.D., discuss their mutual problems with symposium participants. Dr. Baskin heads the center at Mt. Carmel Mercy Hospital, Detroit, while Dr. Peirce's responsibility is at St. Mary's, Grand Rapids.

Consulting with John M. Weller, M.D., is Marjorie Earl, R.N., detection coordinator for the Kidney Foundation of Michigan. Dr. Weller heads the Scientific Advisory Board of the Foundation, which has launched a program to screen Michigan school children for undetected abnormalities of the kidney. Bowling proprietors of Michigan and Free Press charities sponsor the program.

Sixty trees for the Medical Center were planted on Earth Day. Acting Dean Tommy N. Evans, MD, with shovel; George E. Gullen, Jr., Pontiac, WSU vice president for University Relations, and Mrs. Olga Dworkin, Farmington, representing WSU alumni, led off the ceremonies.

The Gordon H. Scott Hall of Basic Medical Sciences, center, is the new home of the WSU School of Medicine, starting this month. Scott Hall, on the Detroit Medical Center, is 10 stories high and has almost as much floor space as Cobo Hall.

GIVE
FOR
DETROIT
GENERAL
HOSPITAL
PATIENT CARE
FUND
DGH DAYS

WSU medical and nursing students raised over $12,000 in their third annual drive to aid Detroit General Hospital. A highlight of the drive, which began with a rally in downtown Kennedy Square, was Detroit Mayor Roman S. Gribbs' proclamation on the DGH Days campaign. Participants included, from left, Sol Edelstein, senior medical student; Jacob Chason, MD, acting associate dean, school of Medicine; senior nursing student Elizabeth Zaliagiris; Lawrence Weiner, MD, acting associate dean, School of Medicine; Mrs. Darimell Waugh, assistant WSU professor of maternity and pediatric nursing, and junior medical student Ronald Gleen.

Michigan Medicine

Breaking News: Deadline, June 23
July 1971, Volume 70, Number 16
Michigan State Medical Society

Doctors asked to report if unable to obtain malpractice insurance

Two major malpractice insurance carriers have disclosed tightened restrictions in issuing coverage to physicians in Michigan. Medical Protective Co., largest professional liability carrier for Michigan MD's, announced that it is not accepting applicants for insurance in Classes III, IV, and V, as solo practitioners. The Shelby Mutual Insurance Co. announced that it is not now accepting any new applicants. However, both will issue coverage to new physicians if they enter a partnership or professional corporation which already is covered.

Physicians who cannot obtain malpractice insurance are asked to contact MSMS to help MSMS obtain information to place before the Special Legislative Committee to study Malpractice and Professional Liability.

Types of practice affected by the Medical Protective announcement are: Class III—Proctology, Ophthalmology, Emergency Room work; Class IV—General Surgery, Urology, Thoracic Surgery, Cardiovascular Surgery, Colon and Rectal Surgery, Pediatrics, Otolaryngology, General practice performing any surgery; Class V—Obstetrics and Gynecology, Anesthesiology, Orthopedic Surgery, Plastic Surgery, Neurological Surgery, Otolaryngology including plastic surgery, Dermatology, and General Practice administering general anesthesia, spinals, saddle blocks or caudals, or performing any surgery in this class.

Doctor Hansen honored

A special "Certificate of Appreciation and Commendation" was presented to Harvey C. Hansen, MD, Battle Creek, at a recent meeting of the Calhoun County Medical Society. Doctor Hansen had served 25 years as a Calhoun delegate to MSMS House of Delegates and as a former MSMS councilor for eight years.

School health education conference

Genevieve Howen, MD, Chief of the Child Health Division made a presentation on "Health Needs of Michigan Youth in Perspective," at a Conference on School Health Education held June 10, at the Michigan Dental Association Building in Lansing. The conference was co-sponsored by the Dental Association, the Michigan Health Council, and the Michigan State Medical Society, as part of an effort to bring about more comprehensive and balanced curricula.

CAPSULES

Garnet T. Ice, MD, Detroit physician, was honored as Physician of the Year recently at the Detroit Medical Society's annual conference held in the Rackham Education Memorial. Called Clinics Day and Awards Luncheon, the event featured as its main topic of discussion sickle cell anemia.

* * *

Enlarged or chronically infected tonsils and adenoids were the number one cause of hospitalization nationally in 1969, according to the Commission on Professional and Hospital Activities (CPHA). This information was learned in a study based on 7,400,000 patients discharged in 1969 from 1,281 hospitals participating in the Professional Activity Study (PAS).

* * *

The Michigan Dental Association general assembly adopted an annual $10 per member dues increase and approved a $20 assessment for financial support of the new MDA building at the recent annual business session. Other major actions included the installation of Richard S. Youngs, DDS, Adrian, as 1971-72 president and the unanimous choice of Harry J. Pearsall, DDS, Bay City, as president-elect.

* * *

A MSMS display offered publications from the AMA and the Michigan Health Council to participants at the University of Michigan Conference on Aging, June 7-9. More than 500 physicians, social workers, and others attended. Assistant HEW Secretary Egeberg was one keynote speaker. Sponsored by the Institute of Gerontology, a joint project of the U-M and WSU, the conference is the oldest academic forum devoted to problems of the aged.

* * *

The body of David B. Wentworth, MD, 29, son of Doctor and Mrs. John E. Wentworth of Flint

CAPSULES/Cont.

was discovered May 31 in Yosemite National Park. Missing since May 21, Doctor Wentworth, a 1967 graduate of the University of Michigan Medical School who had established a general practice in Truckee, California and planned to continue surgical training at Kaiser Hospital in San Francisco, apparently fell 400 feet while mountain climbing alone. Arrangements for a memorial service in Flint will be announced. Contributions may be made to the Student Loan Fund of the Genesee County Medical Society.

* * *

Discussions about priorities for the new MSMS Bureau of Economic Information have been held recently by John Anthony, Bureau chief, with members of the MSMS advisory committee — Brooker L. Masters, MD, chairman, MSMS Committee on Planning and Priorities; Robert Rice, MD, chairman, MSMS Committee on Government Medical Care Programs, and Dale Kessler, MD, chairman, MSMS Committee on Medical Socio-Economics.

* * *

The national Chamber of Commerce, after a referendum of various health care proposals, has decided to support bills which include these elements:

American Businessmen, in referendum by Chamber of Commerce of U.S., have rejected President Nixon's basic approach to solving nation's health care problems. Administration legislation pending in

New medical facility opened in East Side Detroit

The new Detroit Medical and Surgical Center, which opened June 10, marked the culmination of dedicated planning by five Detroit doctors and the realization of greatly improved medical care for East Side residents. Sponsored by the National Medical Foundation, Inc., a newly established division of the predominantly black National Medical Association, the new facility was financed by five East Side doctors aided by a Sears-Roebuck Foundation grant and an F.H.A. mortgage from the Equitable Life Insurance Society of America. The N.M.A. Foundation's function was to encourage doctors, particularly those in ghetto areas to establish non-discriminatory medical facilities in a number of U.S. cities.

The Center was organized by Doctors A. W. Boddie, W. T. Hill, C. W. McIntosh, M. A. Richards and Lionel F. Swan, all of whom had private practices in the East Side community.

The million-dollar Detroit Medical and Surgical Center, located in the core of the East Side, will employ 12 physicians and two dentists and will include X-ray facilities, laboratories, and physical therapy and ambulatory medical care. Doctor Swan added that because the staff of the Center is uniquely committed to its success there will be very few services which it will not be able to provide. Patients who require highly specialized services will be treated in a number of Detroit hospitals under special arrangements which will guarantee first rate care. "What we are providing at the Detroit Medical Center," said Swan "is a place anyone would be proud to visit, a place where only the business office knows the patient's financial status. Each staff physician will be full-time, and will have his only office at the Center, so that a patient will not have to fear being shuffled from one doctor to another when he comes in for treatment."

Sidney Adler, MD, Detroit, President-Elect of MSMS represented the Medical Society at the dedication ceremonies.

Involved in the President's luncheon held April 30 at the State Convention of The Michigan State Medical Assistants Society were Doctor Sheldon Fellman, second from left, speaker at the event and Pat Austin, far left, presiding president. Also present at the affair, which honored county presidents and past state presidents, were Doctor Vernon Bass, second from right, and Nadine Jones, far right, program chairman. The luncheon was held at Weber's Inn in Ann Arbor.

IRS finds few errors

The recent IRS scientific sample survey of 8,400 health care providers who participated during 1968 in Medicare and Medicaid, including physicians and dentists, revealed that 83 per cent reported their receipts correctly. Forty seven cases have been referred to the intelligence division for preliminary or full scale tax fraud investigation.

Fifteen per cent of all taxpayers in the study under-reported receipts by an average of $7,700, according to the IRS, and two per cent over-reported, by an average of $16,000.

The survey was based in the main on providers of care who as individuals received $25,000 or more from federal programs.

WSU alumni elect

James J. Horvath, MD, has been chosen president-elect of the Wayne State Medical School Alumni Association at the Annual Clinic Day.

Lawrence Gardner, MD, Lathrup Village, was installed as president for 1971-72, succeeding Jack Ryan, MD, Warren.

Four doctors were elected to three-year terms as governors of the medical alumni association: Robert Lucas, MD, Detroit; David P. Corbett, MD, Harper Woods; Joseph R. Montante, MD, Orchard Lake; and Clement J. Pollina, MD, Grosse Pointe Park.

FROM ONE DOCTOR TO ANOTHER . . . outgoing Wayne State University medical alumni president Jack Ryan, MD, (left) passes the gavel to 1971-72 president Lawrence Gardner, MD, Lathrup Village. Banquet toastmaster Charles C. Vincent, MD, Detroit physician, applauds the ceremony held recently at the WSU Clinic Day banquet. The Clinic Day program, which included scientific discussions and alumni awards, was also the occasion for the induction of new officers of the medical alumni association.

CAPSULES/Cont.

Congress would require businesses to provide minimum health insurance coverage to all their employees.

* * *

The New Mexico Medical Foundation recently created by the New Mexico Medical Society, has contracted with the State Welfare Department to set up peer review mechanisms for Medicaid there.

* * *

The presidents of the Macomb, Oakland, and Wayne County medical societies have been notified by HEW that the Health and Nutrition Examination Surveys of persons ages one through 74 will be conducted in their respective areas soon.

* * *

The State Advisory Council recently heard John T. Dempsey, Director of Bureau on Programs and Budget, Executive Office, comment that Governor Milliken plans a high priority for CHP. An inventory of resources, upgrading the position of Director, and a "beef-up" of staff will make this program more meaningful by improving its role and function, he said.

It was announced that area wide councils in the Jackson, Flint, Southwestern and Saginaw areas will get additional organizational funding.

The Upper Peninsula Areawide Comprehensive Health Planning Association board of directors unanimously approved a resolution opposing transfer of this program to the Michigan State Department of Public Health or to any other state agency whose scope of activity does not include all the aspects of comprehensive health as required by P.L. 98-749.

The State Advisory Council approved a motion on May 25, 1971 also opposing this legislation.

* * *

A five-bed Coronary Care Unit has opened in University of Michigan Hospital to care for patients and to serve as a statewide model for smaller hospitals. A $106,272 grant from the Kellogg Foundation paid for the new equipment, including a unique computerized record keeping system for each patient. An earlier $380,000 Kellogg grant supports a statewide

"Ladies and gentlemen of the jury . . ." First witness at the recent trial of Harry A. Towsley, MD, was University of Michigan President Robben W. Fleming, pictured as he testified that Dr. Towsley (seated) was indeed "guilty" of outstanding service to his fellow man. The occasion for the mock trial was the retirement of Dr. Towsley after 40 years with the U-M.

CAPSULES/Cont.

coronary care development program for small community hospitals, directed by Doctors Ernest J. Reynolds, Jr. and Park Willis, III. University of Michigan physicians, with the assistance of the department of postgraduate medicine, will aid 36 hospitals to set up their own coronary care units. Kellogg grants totalling more than $400,000 will pay for part of these installations.

* * *

Leaders of 21 Michigan speciality organizations have attended four special meetings with MSMS President Harold H. Hiscock, MD, Flint. They have been discussing peer review, RVS, membership services and other vital issues.

Doctor Towsley's Achievements Cited

Several hundred friends of Harry A. Towsley, MD, honored him on his impending retirement at a reception and dinner in Ann Arbor on June 8.

University of Michigan President Robben Fleming said, "Harry A. Towsley is one of those rare leaders whose interest and accomplishments have spanned many fields.

"As a pediatrician he has excelled both as a teacher and as a kind and thoughtful practitioner. His contributions to this field include numerous scientific papers and a term as President of the American Academy of Pediatrics. It has often been said that Harry Towsley's two major goals in life are to make Michigan babies the healthiest and Michigan doctors the best informed in the world. Throughout his career he has worked to achieve the latter goal in a variety of ways: as Chairman of the Department of Postgraduate Medicine at the University of Michigan Medical School; as Chairman of the Postgraduate Education Committee of the Michigan State Medical Society; and through his work with the Michigan Health Council."

On this occasion, the Harry A. Towsley Visiting Professorship was announced. The purpose of the professorship is to recognize the great role that Doctor Harry A. Towsley has played in medical education at the University and throughout the state of Michigan, and to enlarge the teaching, research and patient care resources of The University of Michigan Medical Center.

MSMS President and Mrs. Harold H. Hiscock, officially represented the Michigan State Medical Society along with Director Warren F. Tryloff.

Honor two WMU med school professors

I. Muir Clapper, MD, professor of internal medicine and Marjorie Peebles-Myers, MD, adjunct assistant professor of internal medicine, were honored by Distinguished Service Awards at WSU School of Medicine Commencement. The awards cited their outstanding achievements as physicians and teachers. Both physicians are WSU medical alumni.

A graduating class of 141—the largest in the school's history—received Doctor of Medicine degrees from President Keast. Commencement speaker was John H. Knowles, MD, general director of Massachusetts General Hospital.

Doctor Rhoades president-elect of AGS

Francis P. Rhoades, MD, Detroit, was chosen president-elect of the 8,000-member American Geriatrics Society recently at its 28th annual meeting in Chicago. Irving S. Wright, MD, New York, N. Y., is President for 1971-72. Doctor Rhoades is a past president of the Wayne County Medical Society.

MEDIGRAMS
LATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JUL 3 0 1971

Michigan Medicine

July 14, 1971, Volume 70, Number 17
Michigan State Medical Society
Reading Time: 2 Mins. 23 Seconds

MSMS LEGAL COUNSEL IS STUDYING the opinion of the Michigan Supreme Court which on July 7 upheld (6-1) a lower court decision against two Oakland County surgeons for breach of contract. The court found no negligence, but did determine that the doctor had promised to produce a cure. A. Stewart Kerr, legal counsel, will discuss implications if any for the practicing physician when he reports to the MSMS Council, July 30-31. The Council will inform MSMS members of legal counsel's recommendations.

IF UNABLE TO GET malpractice insurance, please report to MSMS. For details about this matter, see Page 685 in July issue of Michigan Medicine.

EVERY MSMS MEMBER will receive a questionnaire about physician fees from the new MSMS Bureau of Economic Information about July 20-25. Members are urged to watch for it, fill it in and return it promptly. MD advisors to the Bureau point out that such fee information will enable physicians to take a stronger stand in possible future negotiations.

90 PER CENT PAYMENTS for Medicaid services are continuing in July as the state operates on a one-month interim budget. The same situation is likely in August unless the Legislature suddenly agrees on taxation and appropriation issues. MSMS continues to work for 100 per cent reimbursement for the new fiscal year.

SB 472, SUPPORTED BY MSMS, is due for action on the Senate floor soon. It will require medical and dental examinations in kindergarten, 7th and 10th grades.

TWO BILLS SETTING different re-registration fees have been passed, with final action unlikely until the fall. The House passed a bill increasing the annual re-registration to $25, while the Senate came in with $15. MSMS has argued before the legislative committees that physicians are willing to pay fees necessary to underwrite the cost of operating the Board of Registration in Medicine, but strenuously object to overcharging as a means of raising money for the state. Some legislators had attempted to amend the bills to raise the fees to $100 per year.

RESOLUTIONS DEALING with crime prevention, educational TV, etc., will be considered at the 12th MAP Congress at Mackinac Island, July 26-27.

SENATOR ROBERT GRIFFIN will address joint Congressional Luncheon of MDPAC and State Woman's Auxiliary October 4 at Pantlind Hotel, Grand Rapids, during MSMS Annual Session.

ANALYSIS OF THE INTERNSHIP plans of the recent graduates of Michigan medical schools shows that 83 of the 202 graduates from the University of Michigan will remain in Michigan, and 60 of the 141 Wayne State graduates will intern in the state. California hospitals have appealed to nearly 40 per cent of all those who are leaving the state.

PHARMACISTS ARE URGED by American Pharmaceutical Association to solicit prior drug product substitution authorizations from physicians. The APhA reasons that "This drug product selection authorization procedure is intended to assist pharmacists in obtaining such authorization from prescribers." The APhA is seeking repeal of anti-substitution laws and regulations which prohibit pharmacists from substituting unless authorized by the prescriber.

MSMS will oppose any attempts to repeal anti-substitution legislation. The MSMS Liaison Committee with the Michigan State Pharmaceutical Association views such attempts to be possibly dangerous to patients. Consequences could result in forfeiture of the physician's control of the therapy which his patient receives and might place the physician in a medical-legal bind, the Committee contends.

A FEDERAL GRANT OF $61,830 has been received by Western Michigan Universit to carry through its plans for a Physicians' Assistant curriculum. MSMS ad hoc advisory committee met this week with WMU steering committee on the details.

ALMOST 9 OF 10 MDs in the nation are engaged in patient care. The just-off-the-press AMA's Distribution of Physicians in the U.S., 1970 shows that there were 334,028 MDs at the end of 1970. 89.6% or 278,535 were engaged in patient care -- 192,439 in office-based practice, 34,868 full-time physicians on hospital staffs, 39,779 residents and 11,449 interns. The professional activity of 32,310 other active physicians was classified as medical teaching (5,588), administration (12,158), research (11,929) and other (2,635). 19,621 were inactive.

14 PHYSICIANS HAVE been nominated by component medical societies for consideration by the MSMS Committee on Certificates of Commendation, which will report to the 1971 House of Delegates.

AUGUST 1 is the date the MSMS 94000 Group Blue Cross and Blue Shield program will be reopened for MSMS members. Phone or write Robert Roney, MSMS, to join the program or make any changes in contract coverage.

IMPROVED INSURANCE PROGRAMS are promised by the AMA which had its first experienced executive on hand July 1 to direct the new AMA Insurance Dept.

4-H CLUB MEMBERS toured the Michigan Health Council's Health Careers Mobile during the recent annual 4-H Week at MSU.

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.

© 1971 Michigan State Medical Society.

Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

Second Class Postage Paid at East Lansing, Mich.
and at additional mailing offices.

UNIVERSITY OF CAL
LIBRARY SCH OF MED
THIRD & PARNASSUS AVE
SAN FRANCISCO CAL 94122

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY

DEC 21 1971

MEDIGRAMS

ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

July 29, 1971, Volume 70, Number 18
Michigan State Medical Society
Reading Time: 2 Mins. 23 Seconds

AXES AND APPROPRIATIONS for fiscal year 1971-72 have assumed almost total ominance in Legislative action. The half-billion-plus dollar Social ervices bill, including Medicaid providers line item, has been reported rom House Appropriations Committee, but not made available yet . . .

FLOOR ACTION in the Michigan House of Representatives raised to $35 the proposed annual re-registration fee for doctors of medicine and other health professionals except nurses. The package of bills which passed the House and went to the Senate includes physicians and surgeons, osteopaths, optometrists and chiropractors. The package of bills which passed the Senate and now lies before the House sets doctors' re-registration at $15. Further action is unlikely before fall. The Senate bill, introduced by Sen. Stamm (Kalamazoo) is SB 786; the House bill, by Rep. Spencer, is HB 5108.

OST MEDICAL-ORIENTED legislation has been put off for the fall session, robably in October and November. Likely to get attention in the fall re bills re the Physician's Assistant, bills to require hospitals to btain a "Certificate of Need" for any kind of construction, bills to ermit medical examiners to appoint lay designates, bills to establish a losed regulatory system for dangerous substances, and bills to require lue Cross to contract with all licensed hospitals.

THE MSMS RVS Committee has completed its series of meetings with specialty representatives. The Committee is preparing its report and recommendations for the MSMS Council and House of Delegates.

SMS MEMBERS ARE URGED to read and save the 1971 Annual Scientific Session rogram which will appear in the August issue of Michigan Medicine. Timely opics and outstanding authorities are listed for Wednesday and Thursday, ctober 6 and 7 at the Grand Rapids Civic Auditorium.

THE MSMS COUNCIL is being offered an opportunity to obtain details firsthand from the administrator of the new professional liability contract between the Hartford Fire Insurance Company and Southern California physicians. This group program has been in effect one year in the Los Angeles area with an enrollment of 7,500. A presentation has been made to the MSMS Professional Insurance Committee.

HE MICHIGAN STUDY OF Hospital-Physician Effectiveness -- a joint project f MSMS, Michigan Hospital Association, Michigan Association of Osteopathic hysicians and Surgeons, and the Michigan Osteopathic Hospital Association - has been mailed to hospital administrators, governing boards, and medical taffs. The questionnaires are to be returned during August. The study was nitiated by joint resolutions of the House of Delegates of both MSMS and MHA.

DEADLINE IS AUGUST 12 for MSMS members to return the questionnaire they received recently about physician fees. In the first week, 1,300 questionnaires have been received at MSMS. The survey is the second this year undertaken by the new MSMS Bureau of Economic Information.

IRS has expressed willingness to cooperate with the AMA in investigating cases of unfair or high-handed treatment that physicians might get from IRS agents. Such cases should be reported to MSMS, which will relay on to the AMA.

THE CITIZENSHIP REQUIREMENT for foreign-born physicians has been eliminated in Illinois as one of the prerequisites to licensure. The Illinois State Medical Society estimates this will add at least 100 Filipino doctors to the MD ranks in Chicago alone.

WJR INVITES PHYSICIANS to listen at 12:30 p.m., Sunday, August 1 to a special interview "Remaking Mankind" with Wolf W. Zuelzer, MD, director of the WSU Child Research Center.

HR 10061 reported out by the House Appropriations Committee in Washington carries $18,959,690,000 for HEW; including $82.7 million for Regional Medical Programs, and $2 million for development and research of HMOs; etc.

A CENTRALIZED AGENCY to plan and establish federal priorities for drug education and treatment was advocated recently by Maurice Seevers, MD, MSMS member and chairman of the U-M department of pharmacology, when he testified for the AMA before the House Subcommittee on Public Health and Environment.

Richard S. Wilbur, MD, AMA deputy executive vice president, has begun duties as Assistant Secretary of Defense (health and environment) in Washington, D. C. on a leave from the AMA.

CONVERSION OF FEE HALL, a former dorm at Michigan State University, into an instructional facility for both the College of Human Medicine and College of Osteopathic Medicine, has begun. The project was endorsed by MSMS Work on the building will permit MSU to enlarge its freshman medical schoo class to 83, its DO freshman class to 36.

THE STATE BOARD of Education recently referred the MSMS resolution urging schools to appoint certified athletic trainers to its subcommittee on interscholastic athletics. The Representative Council of the Michigan High School Athletic Association has concurred with the 1970 resolution.

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.
© 1971 Michigan State Medical Society.
Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

Second Class Postage Paid at East Lansing, Mich.
and at additional mailing offices.

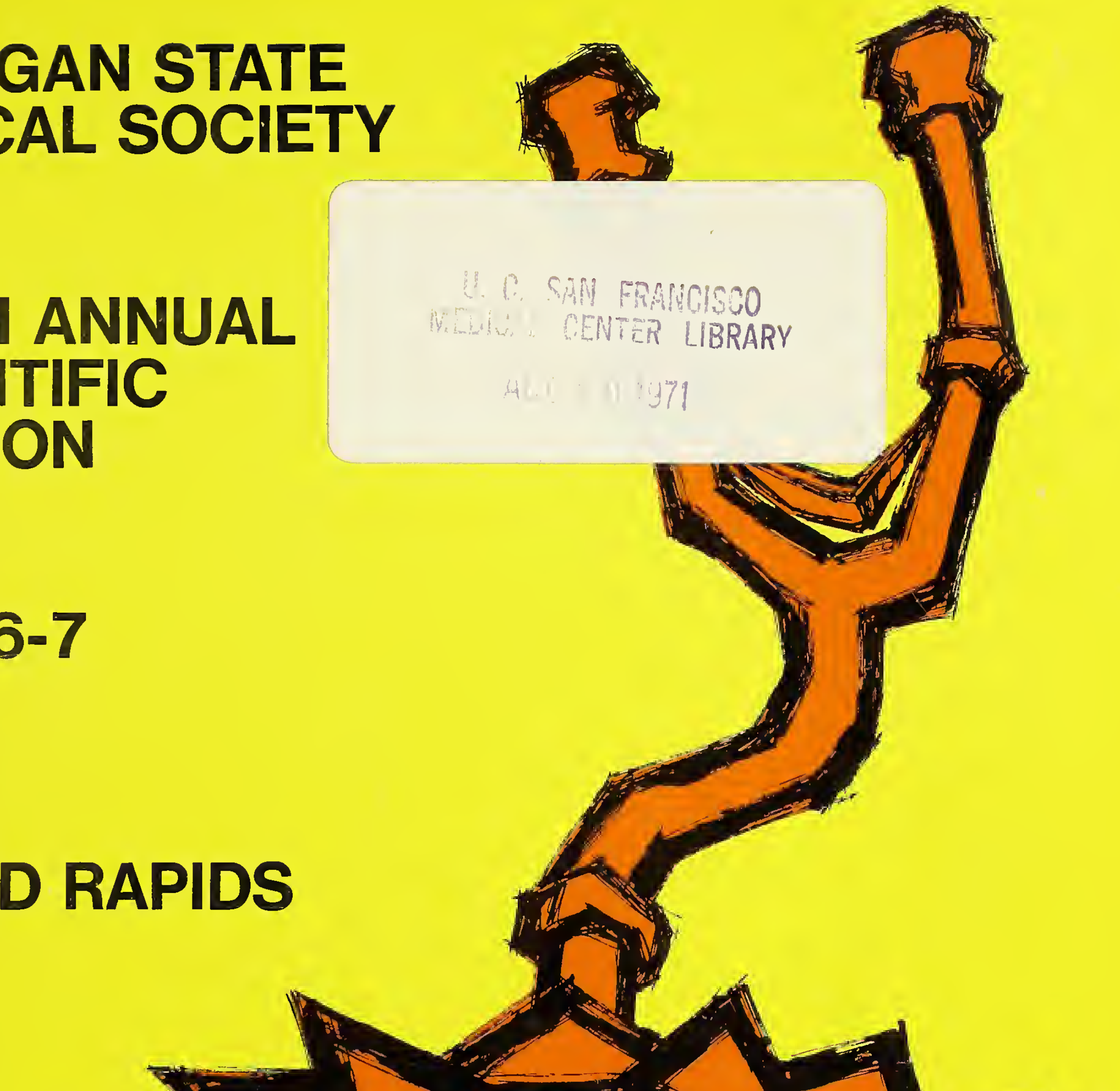
MICHIGAN STATE MEDICAL SOCIETY

106TH ANNUAL SCIENTIFIC SESSION

OCT. 6-7
1971

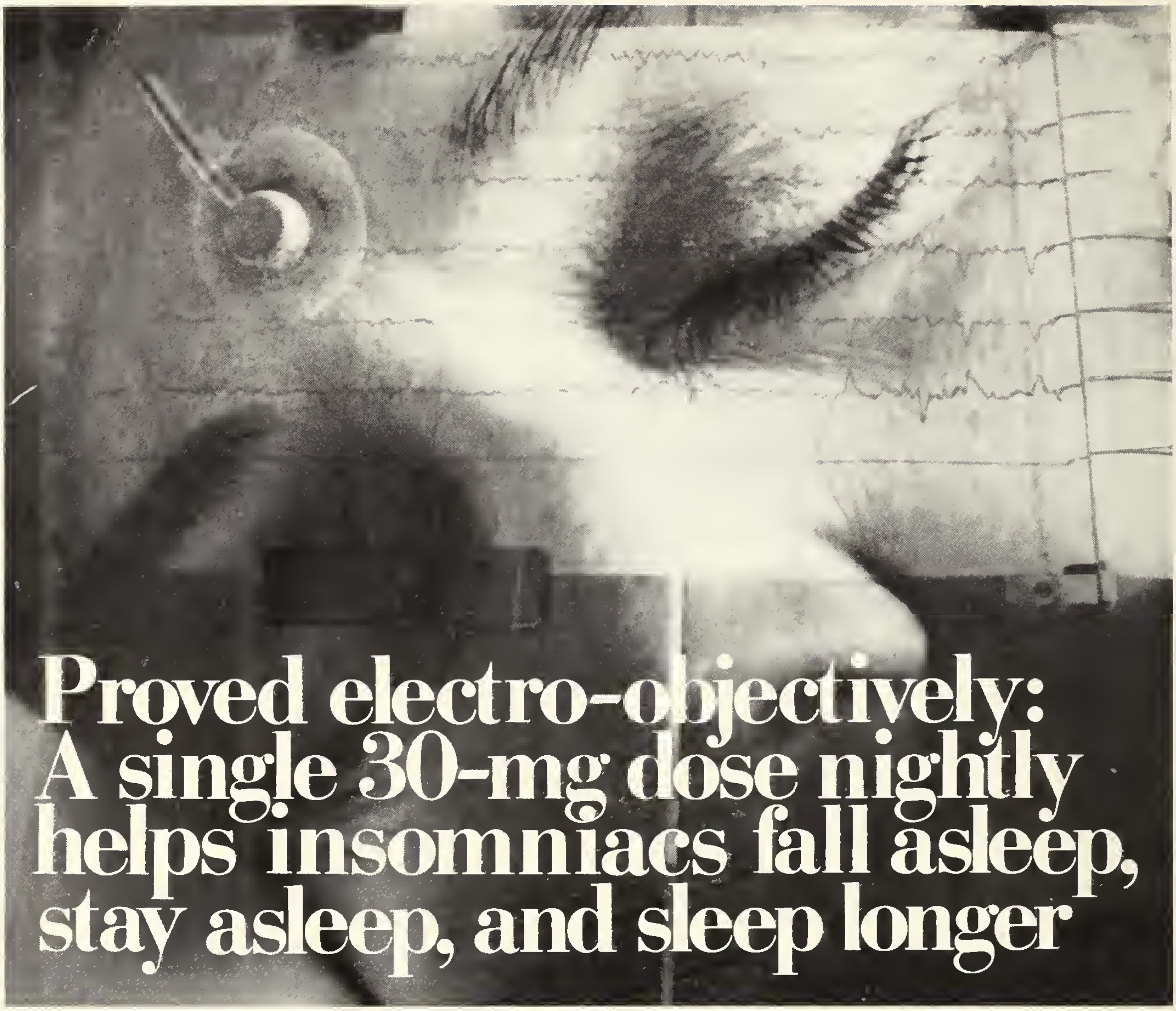
GRAND RAPIDS

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
AUG [illegible] 1971



Michigan Medicine

READ AND SAVE ANNUAL SESSION SCIENTIFIC PROGRAM, PAGES 773-780



Proved electro-objectively: A single 30-mg dose nightly helps insomniacs fall asleep, stay asleep, and sleep longer

Controlled studies of 23 insomniac and 13 normal subjects treated with Dalmane (flurazepam HCl) in five sleep laboratories generated over 4000 hours of electroencephalographic, electro-oculographic and electromyographic tracings. These studies revealed that Dalmane 30 mg nightly usually induces sleep in 22 minutes and provides seven to eight hours of sleep.[1,2,3]

Moreover, Dalmane 30 mg was found to be useful in all common types of insomnia in which it was studied. Of drugs studied in a sleep laboratory,[1] Dalmane 30 mg was the only one that consistently reduced sleep induction time and maintained sleep nightly for 14 consecutive nights of use.

Confirmed clinically

Fifty-three controlled studies using a paired-night, double-blind crossover design have evaluated Dalmane clinically. In the majority of these, Dalmane (flurazepam HCl) significantly reduced sleep induction time and increased sleep duration. Dalmane and a placebo were alternated on successive nights in 2010 insomniacs, 1706 of whom were studied for a single night-pair, and the remainder for as many as fifteen paired-nights. A patient preference for Dalmane was apparent in the paired-night studies.

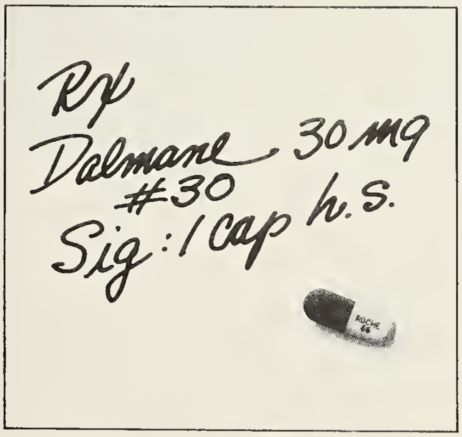
Dalmane was also preferred to certain hypnotics in two separate preference studies. In each of two double-blind studies, Dalmane 30 mg retained effectiveness for the total period of seven consecutive treatment nights, according to subjective/objective evaluations.

In summary, Dalmane is useful in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening. It can be used effectively in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep.

Dalmane (flurazepam HCl) is generally well tolerated

In most instances in which adverse effects with Dalmane were reported, they were mild, infrequent and seldom required discontinuation of the drug. Dizziness, drowsiness, lightheadedness and the like were the side effects most frequently noted, particularly in elderly or debilitated patients.[3] Instances of hepatic dysfunction, paradoxical reactions (excitement) and hypotension are rare with Dalmane, and morning hang-over is relatively infrequent. In studies to date the effectiveness of Dalmane for recommended periods of use is maintained without need to increase dosage.

References: 1. Kales, A., *et al.*: "Effectiveness of Sleep Medications: All-Night EEG Studies of Hypnotic Drugs," in Proc. 7th Internat. Cong. Electroencephal. and Clin. Neurophysiol., San Diego, Calif., Sept. 13-19, 1969. **2.** Kales, A., *et al.*: "Psychophysiological and Biochemical Changes Following Use and Withdrawal of Hypnotics," in Kales, A. (ed.): *Sleep: Physiology and Pathology,* Phila., Lippincott, 1969, p. 331. **3.** Data on file, Medical Department, Hoffmann-La Roche Inc.



Before prescribing, please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

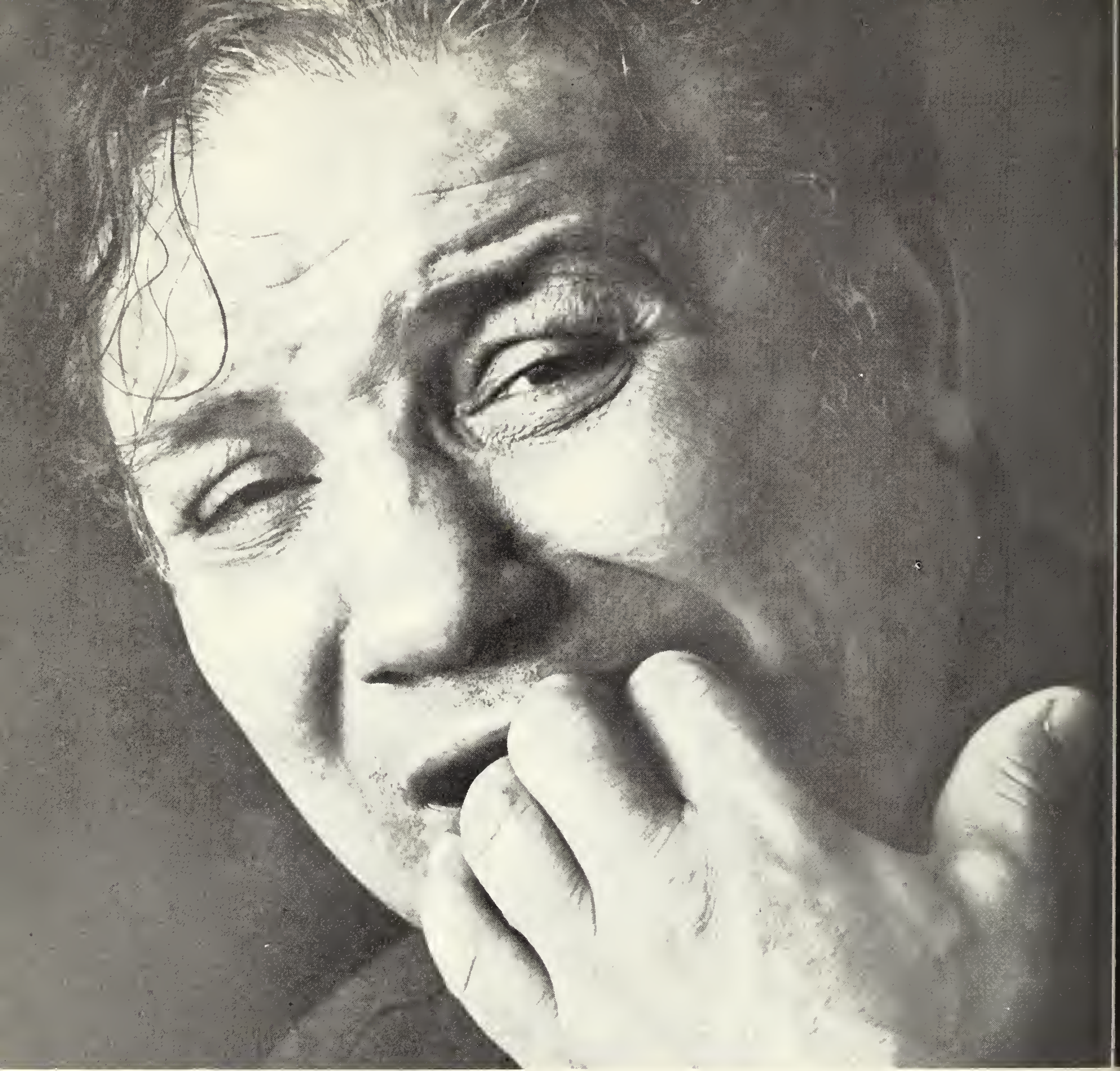
Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

For the sleep your patients need

New **Dalmane**®
(flurazepam hydrochloride)

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



DU-7019

Who's afraid of the big bad enema?

We all are. But Dulcolax is the cure for enemaphobia It can do almost anything an enema can — except look scary

Just one suppository usually assures a predictable bowel movement in 15 minutes to an hour Gone are the tubing, the "accidents", and the bruised egos associated with enemas.

For preoperative preparation, the combination of tablets at night and a suppository the next morning usually cleans the bowel thoroughly Suppositories may also be particularly helpful when straining should be avoided as in postoperative care.

As with any laxative, abdominal cramps are occasionally noted. The drug is contraindicated in the acute surgical abdomen.

Dulcolax®...it's predictable
bisacodyl

Geigy GEIGY PHARMACEUTICALS, DIVISION OF GEIGY CHEMICAL CORPORATION, ARDSLEY, NEW YORK 10502 UNDER LICENSE FROM BOEHRINGER INGELHEIM G. M. B. H.

Michigan Medicine

IN THIS ISSUE

SCIENTIFIC ARTICLES

699 The Physician and the clinical laboratory; John G. Batsakis, MD; Donald A. Baty, MD
705 Pulmonary infarct presenting as a coin lesion: Case report and literature review; Luis A. Tomatis, MD; Ray Miller, MD

SPECIAL ARTICLES

710 Arm Mends, Marcia Recovering; C. R. Shelton
724 Consider the Consultation; David S. Greenbaum, MD
730 A Viewpoint on Pollution; C. E. Rupe, MD

OTHER FEATURES

692 MSMS Leadership
693 President's Page
697 About Doctors
704 Perinatal Tips
722 The Viewbox
726 Your Opinion Please
731 Michigan Mediscene
735 Drug Therapy Problems
736 Monthly Surveillance Report
742 Medical Care Programs
744 Ancillary
746 New Members
756 County Societies
756 Medicolegal
756 Michigan Authors
758 In Memoriam
769 Breaking News
773 Annual Scientific Session Program

The eye-catching design on the cover was developed by Robert Brent, publications designer for Michigan State University, and will be used on other promotional materials for the 1971 Annual Scientific Session in Grand Rapids this coming October.

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published Semi-Monthly, Trimonthly in January and December; 26 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351. © 1971 Michigan State Medical Society.

SCIENTIFIC EDITOR
John W. Moses, MD

EXECUTIVE EDITOR
Herbert A. Auer

MANAGING EDITOR
Judith Marr

PUBLICATION COMMITTEE

Robert M. Leitch, MD
Battle Creek
Chairman

Donato F. Sarapo, MD
Adrian

Edward J. Tallant, MD
Detroit

INFORMATION FOR CONTRIBUTORS

1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size (8½ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.
2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.
3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by Michigan Medicine.
4. Articles should ordinarily be less than four printed pages in length (3000 words).
5. References should conform to *Cumulative Index Medicus,* including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.
6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. New items and notes are welcome.
7. It is understood that material is submitted for exclusive publication in Michigan Medicine.

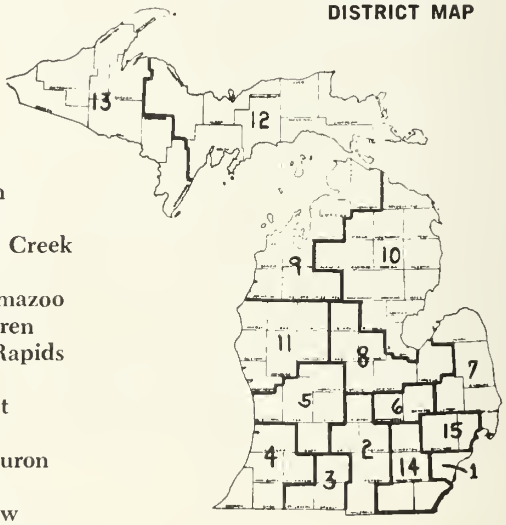
MSMS Leadership

PRESIDENT: Harold H. Hiscock, MD, Flint
PRESIDENT-ELECT: Sidney Adler, MD, Detroit
SECRETARY: Kenneth H. Johnson, MD, Lansing
ASST. SECRETARY: Brooker L. Masters, MD, Fremont
TREASURER: John R. Ylvisaker, MD, Pontiac
ASST. TREASURER: C. Allen Payne, MD, Grand Rapids
SPEAKER: Vernon V. Bass, MD, Saginaw
VICE-SPEAKER: James D. Fryfogle, MD, Detroit
PAST PRESIDENT: Robert J. Mason, MD, Birmingham

COUNCIL CHAIRMAN: Ross V. Taylor, MD, Jackson
VICE-CHAIRMAN: Brooker L. Masters, MD, Fremont
DIRECTOR: Warren F. Tryloff, East Lansing
GENERAL COUNSEL: Lester P. Dodd, Detroit
LEGAL COUNSEL: A. Stewart Kerr, Detroit
SCIENTIFIC EDITOR: John W. Moses, MD, Detroit
ECON. CONSULTANT: Clyde T. Hardwick, Houghton
HISTORIAN: Wm. J. Stapleton, Jr., MD, Detroit
ASST. HISTORIAN: Wm. M. LeFevre, MD, Muskegon

AMA DELEGATES
Otto K. Engelke, MD, Ann Arbor
John R. Heidenreich, MD, Daggett
Luther R. Leader, MD, Royal Oak
Robert E. Rice, MD, Greenville
John J. Coury, MD, Port Huron
George W. Slagle, MD, Battle Creek
Donald N. Sweeny, Jr., MD, Detroit (Chairman)
Joseph A. Witter, MD, Rochester

ALTERNATES
John W. Moses, MD, Detroit
Paul T. Lahti, MD, Royal Oak
Harold A. Furlong, MD, Pontiac
Bradley M. Harris, MD, Ypsilanti
James C. Danforth, Jr., MD, Detroit
Marjorie Peebles Meyers, MD, Detroit
Robert C. Prophater, MD, Bay City
Vernon V. Bass, MD, Saginaw


COUNCILOR DISTRICT MAP

First District Councilors: (Wayne County)
Edward J. Tallant, MD, Detroit
Ralph R. Cooper, MD, Detroit
Frank G. Bicknell, MD, Detroit
Milton R. Weed, MD, Grosse Pointe Park
Brock E. Brush, MD, Detroit
Second District Councilor: Ross V. Taylor, MD, Jackson
Counties: Clinton, Eaton, Hillsdale, Ingham, Jackson
Third District Councilor: Robert M. Leitch, MD, Battle Creek
Counties: Branch, Calhoun, St. Joseph
Fourth District Councilor: W. Kaye Locklin, MD, Kalamazoo
Counties: Allegan, Berrien, Cass, Kalamazoo, Van Buren
Fifth District Councilor: Noyes L. Avery, MD, Grand Rapids
Counties: Barry, Ionia-Montcalm, Kent, Ottawa
Sixth District Councilor: Ernest P. Griffin, Jr., MD, Flint
Counties: Genesee, Shiawassee
Seventh District Councilor: John J. Coury, MD, Port Huron
Counties: Huron, Sanilac, Lapeer, St. Clair
Eighth District Councilor: A. Carl Stander, MD, Saginaw
Counties: Gratiot-Isabella-Clare, Midland, Saginaw, Tuscola
Ninth District Councilor: Adam C. McClay, MD, Traverse City
Counties: Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet combined), Wexford-Missaukee
Tenth District Councilor: Robert C. Prophater, MD, Bay City
Counties: Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties, (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined)
Eleventh District Councilor: Brooker L. Masters, MD, Fremont
Counties: Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana
Twelfth District Councilor: William A. LeMire, Sr., MD, Escanaba
Counties: Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger
Thirteenth District Councilor: Donald T. Anderson, MD, Wakefield
Counties: Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon
Fourteenth District Councilor: Donato F. Sarapo, MD, Adrian
Counties: Lenawee, Livingston, Monroe, Washtenaw
Fifteenth District Councilor: Sydney Scher, MD, Mount Clemens
Counties: Macomb, Oakland

President's Page

MSMS, AMA ACTIVE IN ADDING MORE DOCTORS

H. H. Hiscock, M.D.
MSMS President

Allegations that the Michigan State Medical Society, the American Medical Association and physicians in general—have tried to limit the number of medical students is far, far from the truth . . .

* * *

In Michigan, the Michigan State Medical Society has been in the leadership role urging the legislature, governor, and others to appropriate more funds to the Michigan medical schools so they can increase their enrollments. For some time, MSMS urged the expansion of the University of Michigan and Wayne State University Medical Schools, and then supported the establishment of a two-year medical school at Michigan State University. Then MSMS recommended that MSU become a full four-year medical school—and MSU will graduate its first class in the June of 1972. MSMS continues to appeal to responsible leaders and bodies to expand all three medical schools.

MSMS since 1965 has supported the concept of the physician's assistant and is providing official support and assistance to Western Michigan University, which hopes to begin such a new curriculum in 1972.

* * *

The AMA has assisted in efforts that added five new medical schools in 1971 and will add 5 more in 1972. The 1972 total will be 113 and will reach an estimated 120 in 1980. There are 70 universities now considering possible new medical schools. In 1970 there were 11,360 places open for freshmen medical students, and there were 25,400 applicants, including an estimated 7,590 qualified applicants who were not accepted.

* * *

For the past 19 years, the American Medical Association has been operating under a policy adopted by the House of Delegates in June, 1951, under the heading "Policy of the American Medical Association Regarding the Production of Physicians." The statement reads in part:

"Discussion of the supply of physicians in the United States in recent years has sometimes implied that the American Medical Association, through its Council on Medical Education and Hospitals, seeks to limit the supply of physicians in this country by limiting the number of medical schools it approves, by curtailing enrollments in schools it approves, or by otherwise preventing expansion of the nation's facilities for the training of physicians. It is important that there be a clear understanding of the policies of the American Medical Association in this area.

"The American Medical Association *has no desire* to limit the production of properly trained physicians to serve the American people. The policy of the Association is to assist and encourage any responsible group or institution endeavoring to create new facilities or expand existing facilities for the training of physicians.

"The number of medical schools approved is determined entirely by the ability of schools to meet acceptable educational standards. All medical schools

(Continued on Page 694)

in operation in the United States are fully approved by the American Medical Association.

"The AMA does not attempt to regulate the size of the national student body of medicine. The number of students admitted to individual schools is determined by the faculties, administrative officers and governing boards of each school, in accordance with the school's educational philosophy and its own judgment of its educational resources . . .

"The number of medical students in approved schools has been steadily increasing . . . The American Medical Association has lent every aid and encouragement to this sound expansion. In many states the medical societies have provided effective leadership in the establishment of new medical schools and the expansion of existing schools.

"Still further increases in the production of physicians are in prospect."

* * *

The charge that the AMA has tried to limit the number of medical students is frequently made, but there is very little justification.

The only action that can possibly be cited in support of this charge is one taken in the depth of the depression. The 1933 AMA annual session received a report of its Council on Medical Education and Hospitals which estimated a surplus of 25,000 physicians in the nation.

* * *

In the 38 years that have elapsed since that time, the American Medical Association has taken various actions *encouraging* the training of more physicians.

Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction
THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA
Professional Protection Exclusively since 1899

DETROIT OFFICE: R. K. Wind, J. K. Galloway and D. J. Antan, Representatives
27200 Lahser Road, Southfield 48076, Telephone: (Area Code 313) ELgin 3-4848 or 444-1439

GRAND RAPIDS OFFICE: G. J. Haworth, Representative
422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477

HEALTH INSURANCE ALTERNATIVES DEBATED

"The system nearest to the ideal is more likely to be found with voluntary health insurance than with any other method of health care financing."

That statement was recently made by R. J. Turner, director of the Australian Hospitals Contribution Fund. The AHCF is one of Australia's three largest voluntary, non-profit health insurance organizations.

Mr. Turner, who knows the strengths and weaknesses of the Australian government approach to health care, observed that "In many cases government's sincere belief in the provision of health care as a right for everyone in the community blinded them to the open-ended nature of health care costs." He continued, "In quashing the initiative for progress which derives from competing health insurance funds offering continually better services to the community, government invites backlash against the standardization and stagnation of a single monolithic state-run scheme."

Mr. Turner, in an address before the New Zealand Royal Commission on Social Security, recommended that "voluntary health insurance could provide the key to a reconstructed health scheme in New Zealand."

Mr. Turner often has pointed out that, "too many private health insurers in the USA seem to accept as inevitable that government will eventually take over their business."

"In Australia," Mr. Turner said, "we are heavily influenced by everything that happens in America and we know that any further government encroachment in America only weakens the Australian approach." Australia has a National Health Scheme built on voluntary health insurance sold by mutual, non-profit organizations called "registered funds" which cover 80% of the insurable population. The federal government subsidizes coverage for indigents.

What Really Happens To Publicity Releases?

The chances of getting an idea to the public via news release have always been slim, and the odds aren't improving.

Editors say they toss aside from 80% to 90% of the releases they get, and what they accept runs the risk of ending up in overset. If the item reaches print, it likely will be buried on an inside page. A recent survey concluded that news releases run a rough track.

WE HELP YOU KEEP MOM IN THE PICTURE...

A Fast, Quality-Controlled Pap Screening Service Is Important

- For physicians interested in cancer prevention through quality Pap smear tests
- Over 80 years of staff experience
- Quality control with rapid service
- Attractive prices because of high volume
- Hormonal evaluation incuded at no extra charge

Send for your free introductory packet

Please Print

NAME__________

ADDRESS__________

CITY__________

STATE__________ ZIP__________

Cytology Laboratory
NATIONWIDE CANCER SCREENING SERVICE
P.O. Box 455, Corona del Mar, California 92625

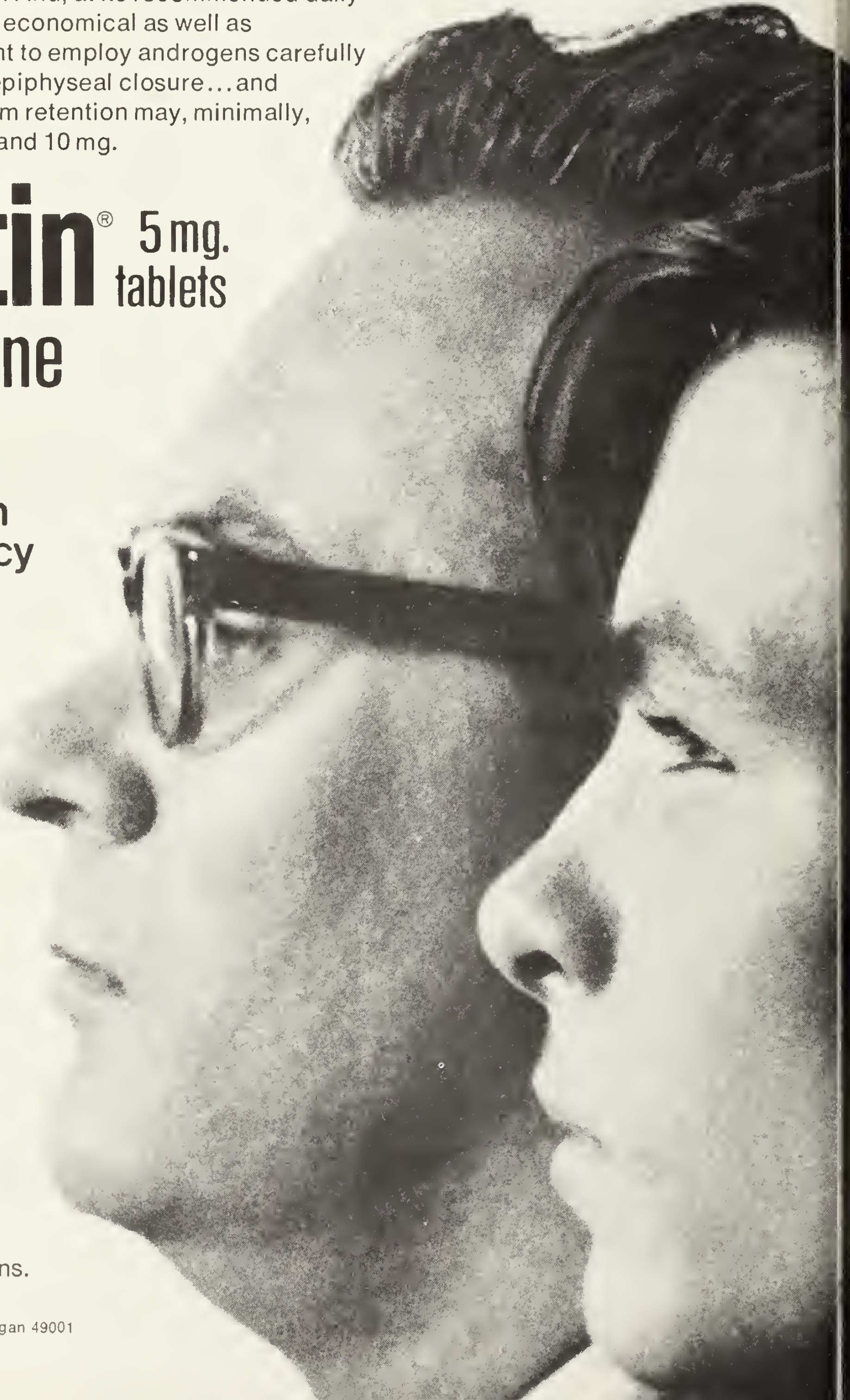
when manhood ebbs.. or is delayed due to testicular hormonal insufficiency

What nature denies, Halotestin may replace. That's the purpose of this orally active androgen in conditions such as impotency, eunuchoidism, and eunuchism. The most widely used agent of its kind, Halotestin is replacement therapy with approximately five times the potency of oral methyltestosterone. And, at its recommended daily dosage of 2 to 10 mg., Halotestin is economical as well as convenient. Of course, you will want to employ androgens carefully in young boys to avoid premature epiphyseal closure... and in the elderly where possible sodium retention may, minimally, precipitate edema. Tablets of 2, 5, and 10 mg.

Halotestin® 5 mg. tablets

[fluoxymesterone Upjohn]

oral replacement with parenteral-like potency



Please see facing column for summary of contraindications, precautions, and adverse reactions.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Halotestin®
(fluoxymesterone, Upjohn)

rally active androgen about 5 times as potent
anabolic and androgenic activity as methyltes-
sterone. Halotestin (fluoxymesterone) induces
ignificant retention of calcium and potassium,
ut retention of sodium not marked. Doses below
0 mg. daily have little effect in producing
reatinuria.
ndications *Male:* Replacement therapy in tes-
cular hormone deficiency states. Prevents atro-
hy of the accessory male sex organs following
astration for as long as therapy is continued.
npotence and male climacteric symptoms when
ue to androgen deficiency. Primary eunuchoid-
m and eunuchism. Delayed puberty when es-
ablished as not a simple familial trait. Indicated
r those symptoms of panhypopituitarism re-
ted to hypogonadism, however, appropriate
drenal cortical and thyroid hormone replace-
ent therapy remain of primary importance.
emale: Palliation of androgen-responsive, ad-
anced, inoperable breast cancer in women be-
veen 1 and 5 years postmenopausal or women
whom castration has shown the tumor to be
ormone dependent. Prevention of postpartum
reast manifestations of pain and engorgement;
ere is no satisfactory evidence that this drug
revents or suppresses lactation per se. In os-
oporosis androgens may be of adjunctive
lue to adequate considerations of diet, cal-
um balance, physiotherapy and general health
omoting measures. *Males and Females:* In the
atment of protein depletion states which oc-
r in geriatric patients, in debilitation states, in
ronic corticoid therapy, resistant fractures;
yptorchidism; creating a positive nitrogen bal-
ce, tissue repair and other anabolic effects.
ndrogenic steroids may produce a response in
lastic anemias, myelofibrosis, myelosclerosis,
nogenic myeloid metaplasia and hypoplastic
emias due to malignancy or myelotoxic drugs.
ndrogens are not of value in other anemias.
ontraindications Pregnancy (may virilize fe-
ale fetus), mammary carcinoma in the male,
ostatic carcinoma, severe liver disease, severe
rdiorenal disease and severe persistent hy-
rcalcemia.
ecautions Employ with caution in young boys
avoid precocious sexual development and
emature epiphyseal closure. Androgens tend
promote retention of sodium and water, there-
e, watch for edema—particularly in the elderly.
cidence and severity of edema have been
nimal and have been associated only with
h doses used for palliation of breast cancer.
percalcemia may occur, particularly in patients
th metastatic breast carcinoma; if this occurs
drug should be discontinued. Changes in
er function tests, such as increased BSP re-
tion and SGOT levels, can occur during ther-
y. Jaundice has been rarely reported. If liver
ction tests are altered, discontinue medica-
n or reduce dose. Priapism is indicative of
cessive dosage and is indication for tempo-
y withdrawal of drug. When treating protein
pletion states or osteoporosis, an adequate
t should be provided and prolonged immobili-
ion avoided whenever possible. When treating
lastic or hypoplastic anemias, androgen ther-
y should not replace other measure such as
nsfusion, correction of iron deficiency, anti-
cterial therapy, and the use of corticosteroids.
verse reactions Nausea, dyspepsia, men-
ual irregularities, hepatic dysfunction, pria-
m, edema, precocious sexual development,
d premature epiphyseal closure in young
tients have been reported. *Male*—Prolonged
ministration or excessive dose may cause
ibition of testicular function with oligospermia
d decreased ejaculation volume. *Female*—
rge doses or prolonged administration may
duce masculinization with signs such as hir-
tism, deepening of the voice, enlargement of
clitoris, acne, and sometimes, increased
ido.
pplied *Tablets: 2 mg.*, scored—bottles of 100./
mg., scored—bottles of 50./*10 mg.*, scored
ottles of 50.
r additional product information, see your
john representative or consult the package
cular.

pjohn The Upjohn Company, Kalamazoo, Michigan

3-7627-R MED B-5-S (LQX)

About doctors

C. M. Vasu, MD, Grand Rapids
has received for the second time the Michigan Heart Association's Mrs. Elgin Dodge Silver Cup in recognition of his many contributions in the area of state-wide emergency care. Doctor Vasu's recent accomplishments include his teaching of cardiopulmonary resuscitation, now a required skill for ambulance attendants, and his program of providing volunteer physicians at the scenes of accidents.

Harold L. Wright, Jr., MD,
has been named director of Hawthorn Center near Northville. Doctor Wright, who succeeds Ralph D. Rabinovitch, MD, has been the Center's senior clinical psychiatrist and pediatrician and was the acting director for the past six months.

Donald A. Koch, MD, Port Huron,
the first certified radiologist to open a practice in Port Huron, has retired for health reasons. He had practiced in Port Huron since 1950.

Samuel J. Eder, MD, Detroit,
celebrated his 80th birthday recently, marking over a half-century of practice in medicine. Doctor Eder was graduated from the Detroit College of Medicine (Wayne State University) and took his internship at Harper Hospital.

C. Howard Ross, MD, Ann Arbor,
gave the commencement address in June at Moline High School, where he taught 55 years ago before going to medical school.

Julio Badin, MD, Flint,
a pathology resident at Hurley Hospital in Flint, won top honors at Hurley's annual Intern-Resident Day Program in June for his paper, "Partial Absence of the Right Ventricular Musculature."

Bowers Hewitt Growt, MD, Addison,
was honored for 50 years of dedicated service by his appreciative community this summer. Mayor Don Dennis proclaimed "Doctor Growt Week," which also marked his 80th birthday. Doctor Growt was presented a plaque in recognition of his numerous civic achievements.

J. W. Townsend, MD, Vandercook Lake,
was honored by his townspeople on Doctor Townsend Day May 2. The doctor was recognized for his years as local team physician and school board member, with the renaming of Floyd Elementary School to Townsend Elementary School. In addition, a gift of $800 from patients and friends was turned over by Doctor Townsend as seed money for a college scholarship fund.

Now
available for your
prescribing
needs

Cordran® Tape
Flurandrenolide Tape (4 mcg. per sq. cm.)

Additional information available upon request • Eli Lilly and Company, Indianapolis, Indiana 46206
000121

Lilly

The Physician and The Clinical Laboratory

By John G. Batsakis, MD
Donald A. Baty, BS
Ann Arbor

Until recent times, an appropriate credo for clinical laboratories might have been: "our success is without applause; our diligence without reward. We are exposed to censure without hope of praise and disgraced by miscarriage or punished for neglect."

The 10-18 per cent average annual increase in number of analyses performed in the decade just completed certainly indicates a significant change in attitude has occurred. In point of fact, it is now incorrect to consider the "physician-laboratory relationship" in the context conveyed by the title of this paper. More appropriately, this should be "The Physician and *his* Clinical Laboratory." The prefix, *clinical* before laboratory should leave no question as to the orientation of the laboratory to the patient!

The clinical laboratory, then becomes one of the scientific extensions of patient care with the attending physician serving as intermediary for the patient. In addition to this function the physician relates to his clinical laboratory in at least two other important ways: (1) expecting the highest quality in the offered diagnostic aids and (2) fully supporting the clinical laboratory's efforts to deliver these aids.

In the above context, hospital laboratory medicine is not and must not be a strictly proprietary domain. This is not to be misconstrued as approval of decentralization with a surfeit of "splinter" laboratories. There prevails a dangerous conceit that certain types of *clinical* laboratory investigations may be "profitably" divorced from a central, well-equipped laboratory and attached to and controlled by a small, specialized clinical department.[1] Even the most cursory examination will show that this is uneconomical in capital expenditures, in space, and in the effective use of skilled technologists; always in short supply. The clinical laboratory must however, be always alert to the possibility that these "scientific" yearnings of its clinical colleagues do not spring from the laboratory's own inadequacies to meet the demands or goals of the institution it serves. But here again, the physician must aid the laboratory in order that the latter is not caught short in its ability to respond. The repeatedly substantiated increasing dependence on clinical laboratory assistance for the care of the patient makes it *mandatory* that laboratory support, of the lack of it, be always considered in systems planning of a hospital or medical center.

If the joint responsibility (physician and laboratory) be accepted, and the clinical pathologist does not assume or is relegated to a "caretaker" role; what are the problems which beset the modern clinical laboratory?

The simplest answer to this question appears to be the predictable increase in workload. Two Patho-Parkinsonian Laws may apply: (1) where there is a test, someone will keep requesting it; (2) the frequency of the request varies inversely with the amount of work the requestor thereby involves himself in.

Solving the workload problem, in turn generates other problems and these relate to automation and mechanization, effective quality control, interpretation of laboratory tests and an effective data-flow system.

Workload

The magnitude of the yearly increase in laboratory determinations has been mentioned above. It has been further calculated that this demand will double every five years. So-called "screening" procedures will push this increase even faster.

In order for the clinical laboratory to effectively respond to this workload, it must; (1) exploit automation, (2) "simplify" analytical procedures, and (3) more efficiently use the existing manpower.

Automation

Identification of the origin of ill health and the ways intrinsic and extrinsic factors distort the physiological and mental patterns of patients remain the mission of any clinical laboratory. Scientific and instrumental advances have not altered this mission, rather they have only refined and multiplied the technics by which the mission is accomplished.

The authors are with the Department of Pathology, The University of Michigan, Ann Arbor. Their paper was presented at American College of Physicians' course on "Gastroenterology for Clinical Teachers" in Ann Arbor, on Feb. 23-27, 1970.

While it is undeniable that mechanization has permitted the clinical laboratory to keep pace with the increasing demands for service, it must not be forgotten that the signature of mechanization is nothing more than the independent, unchanging and repetitious operation of its apparatus.

One cannot expect from a machine something which lies outside its potentialities. Clinical pathologists and clinicians alike *must* distinguish the machine from the chimeras which have become associated with it and which have nothing to do with its purposes. To do otherwise is to be beguiled into the philosophy expressed by van de Velde:[2] "I love machines; they are like creatures of a higher order. Intelligence has freed them of all the woes and joys which are the lot of the human body in its activity and its exhaustion. Machines on their concrete bases act like serenely meditating Buddahs, squatting on their timeless lotus. They vanish when more beautiful, more perfect ones are born."

Distinction should also be made between the terms automation and mechanization. At present, the use of the term, "automation" in clinical laboratory medicine is a misnomer as the process is *strictly* mechanization. Automation should be reserved for *systems,* as yet not fully developed, in which signals are fed back into the analytical system to control it so that, once started, the process does not require human intervention.

Modern clinical pathology utilizes mechanization of two types: *continuous flow* and *discrete* analyses.

Continuous flow analytical systems are those in which all solutions derived from successive samples pass through the same path throughout the entire analytical process.

A discrete analytical system is one in which the solutions derived from different samples are contained during part or all of the analytical process, in separate vessels. This type of system is capable of using traditional methods of biochemical assay in which the various steps—sampling, addition of reagents, incubation and reading—are mechanized.

Both the continuous flow and discrete systems may be operated continuously or they may function discontinuously with manual transfer of batches of samples between various phases of the analyses.

Delivery rates of these mechanical systems range from 20 to 3,000 determininations/hour. With suitable and appropriate chemistries, accuracy and precision derived from these instruments far exceeds manual test methods.

Three prices are paid for this high output rate and precision: machine dependency, use of the batch-mode configuration in the laboratory operations, and the detrimental element of technical boredom and tedium. The effects of the first as related to malfunction are obvious. Less appreciated by the busy clinician are the two other factors. Efficiency of operation and economical factors dictate the mechanized assistants operate best in a batch-mode and not in an ad lib manner. The extreme of this type of operation leads to machine-dominance of the laboratory at the expense of the patient. The other extreme, however, of a "grocery store" type of operation, i.e., performance of assays willy-nilly, is gone forever.

Fortunately for the patient an appropriate balance within the clinical laboratory has been accomplished. So successfully has this been done that those with only a peripheral acquaintance with clinical laboratory medicine or self-styled "laboratorians" have promulgated a dangerous misconception of what constitutes a laboratory test, i.e., "they *are simple*"!

No laboratory test is simple! They are all involved, complicated to varying degrees and full of pitfalls with the potential and possibility of error existing from the order of the test through the procurement of sample and assay, down to the final transcription of the data onto the requisition form. Through the machinations of quality control, these errors are reducible but probably never completely obviated.

Quality Control

The reduction of error is the purpose of laboratory quality control, but to be effective, it is not a device restricted to the confines of the laboratory itself. Quality control begins and ends at the bedside and the clinician's role is no less than the clinical pathologist's in this respect. If an assay or estimation is worth ordering, an appropriate sample is a key step in the process. A PBI determination in the face of a history of known drug interference contributes nothing but confusion and expense. The seemingly simple step of procurement of the sample is subject to potential error. The most common reason for a serum calcium of less than 3 mgm/100ml at The University of Michigan Medical Center is the collection of the sample in a vacutainer containing EDTA.

Within the laboratory proper, the variables causing error fall into two major groups; (1) avoidable and (2) unavoidable.

The former may affect entire batches of assays and relates exclusively to failure in carrying out an analytical procedure as described; faulty reagents, faulty equipment, electronic malfunction, etc. Other avoidable errors may only affect individual samples. These occur in the processing of

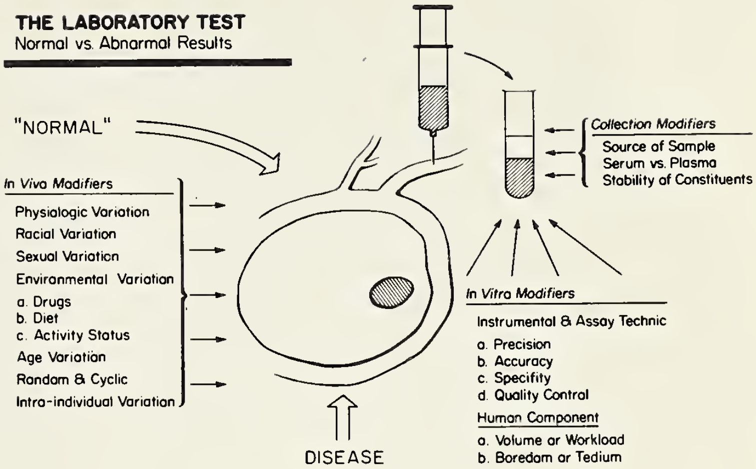

THE LABORATORY TEST
Normal vs. Abnormal Results
"NORMAL"
In Vivo Modifiers
Physiologic Variation
Racial Variation
Sexual Variation
Environmental Variation
a. Drugs
b. Diet
c. Activity Status
Age Variation
Random & Cyclic
Intra-individual Variation
DISEASE
Collection Modifiers
Source of Sample
Serum vs. Plasma
Stability of Constituents
In Vitro Modifiers
Instrumental & Assay Technic
a. Precision
b. Accuracy
c. Specifity
d. Quality Control
Human Component
a. Volume or Workload
b. Boredom or Tedium

Fig. 1.

particular speciments and do not affect the entire batch run. They include mistakes in collection and labeling as well as analytical or transcription (clerical) errors.

Unavoidable "errors" constitute a variability that is composed of two factors inherent in the particular technic for an assay. These are "precision and accuracy."

PRECISION is a measure of the closeness with which repeated analyses of the same material can be made and refers to the relative exactness with which a quantification is made. Precision may be expressed by (a) standard deviation from a mean with ± 2SD encompassing 95.45 per cent of the results; (b) the coefficient of variation (C.V= S.D. expressed as a per cent of the mean rather than an absolute value or (c) as percentiles; most applicable when results are non-Gaussian.

ACCURACY may be defined, in general terms, as the relative exactness by which an estimation represents the "true" or absolute value and implies freedom from error. When applied to biological materials, the term is virtually indefinable. The difference between the calcium concentration obtained by atomic absorption spectrometry and fluorescence assay is an example of the difficulty to define accuracy in clinical medicine.

It would be very convenient to establish a single set of limits for both accuracy and precision which would be applicable to every type of clinical laboratory analysis. The impossibility of such a state lies in the appreciation that all qualitative estimations and many of the primarily quantitative assays are either not subject to these limits or reflect significantly different limits. Some of these differences are technical in nature; others are physiologic. Accuracy and precision of a degree greater than is useful clinically should not be required if extra time or expense is thereby made necessary. Furthermore, the ability to distinguish disease states from health is often more important than the determination of absolute values.[3] The most precise assay available for a biological fluid assay may be entirely unsuitable for clinical laboratory use. These are the assays which are subject to large *random* error due to complex or difficult instrument manipulation, too many technical stages in the preparation of the sample and too complicated calculation of results.

Interpretation of Laboratory Tests

If clinical laboratory estimations are often difficult, time consuming, and expensive—the interpretation of the answers may be harder still. **Figure 1** presents in schematized form most of the variables or "modifiers" at play dealing with the laboratory result that may be interpreted as either "normal" or "abnormal." Three basic groups of modifiers interact to produce a test result in the so-called normal or healthy subject. When disease intervenes, a fourth and major modifier is added.

A definition of the concept of "normalcy" for body fluids has been evolving fitfully for many years. The inadequacy of pioneering studies such as Haldane's in the measurement of "normal" hemoglobin concentration in man, based on only 12 subjects (vigorous, young British males), is still not completely appreciated. The weaknesses in such an approach were belatedly followed by the widespread introduction and acceptance of the Gaussian distribution as a "profound and basic law of nature," by which normals and abnormals could be separated. Only superficially is this an acceptable concept. Elvebeck et al,[4] have justly confided that the Gaussian model is designed for *errors* of repeated measurements of the *same* concentration or distance. Extension of the model for obtaining population norms is *not valid.* Even excluding this very major deterrent, Gaussian distribution does not necessarily represent the true frequency distribution of intersubject measurements in medicine. Many constituents in blood manifest what is called a log-normal distribution and in such cases the use of terms such as means and standard deviation to define a "normal range" is generally inappropriate and can lead to absurd figures.

Despite these very valid criticisms, the calculation of a mean from a series of observations and the establishment of the quantities—M-2 SD and M+2 SD is easy to compute and appealing in its simplicity. If the study population is rigidly defined, this concept of normal range is useful in dealing with *that* population, but lacks basis in clinical practice where decision making concerns the individual. In the latter case, it may prove more profitable and reasonable to record a "range in disease" rather than a range in health. Instead of an arbitrary normal range, the dividing point will then depend on the specific alternative to health.

An awareness of physiological variations in blood and urine concentrations is essential to the correct interpretation of laboratory data. These variations may be cyclic during a 24 hour period; cyclic over longer time periods or manifest a random day to day variation which may be considerable. The concentration of serum iron is a prototype for each of these variations. Serum iron binding levels may fall as much as 50 per cent between morning and afternoon in the same subject. The concentration of serum iron may fall precipitously, often to sideropenic levels, in women just before or during menstruation. In addition, random changes in the serum iron may occur related to changes in sleep and activity.

Drug interference accounts for many of the so-called "laboratory errors." Drugs may modify test results either by a direct, e.g., chromogenic interference, or by the production of in vivo changes, e.g., alteration of protein binding capacity to yield spurious changes in the P.B.I., plasma cortisol, iron binding capacity, etc.

Interpretation also requires some knowledge of analytical methods used for the determination of blood constituents. The estimation of serum albumin concentration perhaps represents this aspect the best. Fessel, et al,[5] and others,[6] have compared the results of serum albumin estimation by four standard technics and found that these might vary from 2.9 to 5.5 g per 100 ml on the same specimen. Electrophoretic separation yields the lowest concentration and the highest level is derived after centrifugation. Dye binding methods and precipation with biuret reaction produce intermediate levels. The reasons for this wide variation relate entirely to the difficulty in separating albumin from its fellow serum proteins and to the different properties of the separated protein, i.e., dye-binding capacity and the number of peptide bonds.

"Biochemical Profiles"

The mechanization of clinical laboratory procedures during the past two decades has been justifiably equated to an industrial revolution in microcosm. As it is with all forms of revolution, various by-products have evolved, often leaving in their wake new problems.

The industrial development of high speed, multi-channel chemical analyzers has produced a rebirth in the often fanciful concept of "biochemical biopsy." The literal inaccuracy of that term is soon appreciated when one recognizes the blunderbuss manner with which the "biopsy" is applied. This is not to denigrate the clinical and economic value of these assays. Significant reduction in cost, diagnostic time and occasionally the establishment of a pre-symptomatic diagnosis have been accomplished.

By-products of these systems, however, threaten to counterbalance the advantages. The increase in number of assays significantly contributes to the already inflated workload of the clinical laboratory and if unchecked imparts an undesirable factory atmosphere highly geared to the rapid turnover of a limited range of data in general high demand. What has started as an imaginative application of mechanization threatens to become an end in itself.

An additional dangerous by-product, particularly relevant to screening instruments, is the policy of "good enough for *clinical* use" in the restraining or constraining of the chemistries adapted to the machines. Except for delivery rates and increased precision, the adaptation of a non-specific assay to mechanization does not really advance clinical biochemistry.

Perhaps the most difficult problem brought about as a by-product of screening systems and laboratory mechanization is what to do with the plethora of data. The assay step in laboratory medicine is but one of three steps, expressed in contemporary machine jargon as in-put, through-put and out-put. Rapid generation of laboratory data often becomes ineffective due to the prolonged time in getting these answers back to the physician. The Siren's call of the computer has dazzled the medical profession by its optimistic claims in solving this data flow and record problem. It is, however, a mistake to assume that the computer's most effective use can be exploited if it is attached to existing patterns of laboratory work or the distribution of the data generated therefrom.[7,8] At present, the price to be paid for reasonable computer assistance in the clinical laboratory is that which usually obtains to automation—batch mode operation.

Summary

Clinical laboratory medicine is in the second decade of what may be defined as a form of industrial revolution. Like its 19th century predecessor, this industrial revolution has elevated clinical laboratories to a state of pre-eminence in the diagnosis and management of patients, but also like its predecessor, new problems have been generated.

Mechanization of clinical laboratories must not become an end in itself; nor should the "tyranny of numbers" supercede clinical judgment in the evaluation of patients.

References

1. Editorial, The Developing Pattern of Clinical Pathology. *J. Clin Path,* 20:1-2, 1967.
2. Van De Velde, H., quoted by F. G. Juenger in The Failure of Technology, Henry Regnery Co., Chicago, Ill., 1956, p. 20.
3. Barnett, R. N.: Medical Significance of Laboratory Results. *Amer J Clin Path,* 50:671-676, 1968.
4. Elvebeck, L. R., Gulliver, C. L., and Keating, F. R.: Health, Normality and the Ghost of Gauss. *JAMA* 211:69-75, 1970.
5. Fessel, W. J., Feichtmeir, T. V., and Spector, D. S.: What is the Albumin Level? A Comparison of Methods for Albumin Determination. *Arch Intern Med* 114:547-550, 1964.
6. Cronkleton, J., Appelman, H. D., and Batsakis, J. G.: The Effect of Bilirubin concentration on Determination of Serum Albumin. *Amer J Med Tech,* 33:306-310, 1967.
7. Martin, N. H.: Research and Development. *J Clin Path,* 22:628-633, 1969.
8. Mitchell, J. H.: Relevance of the Electronic Computer to Hospital Medical Records. *Brit Med J* 4:157-159, 1969.

Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the second pregnancy of a 21-year-old GII PI (2) O negative white mother. She had regular monthly prenatal visits from the third month on. All through pregnancy she had recurrent colds and U.R.I's. At her initial visit she was given tetracycline 250 mgm q.i.d. for six days because of "viral pneumonia." At six months of pregnancy she was given 20 cc of gamma globulin I.M. because of "suspected Rubella." At about 33 weeks of gestation she developed abdominal cramps and soon thereafter had a small amount of bloody vaginal discharge. She contacted her doctor who sent her to the hospital emergency room. There she was seen in consultation with another obstetrician who felt she probably had vaginal bleeding due to partial abruptio placenta. Fetal heart tones were heard, at 90-100 per minute but distant in quality. An emergency C-Section was quickly performed revealing the abruptio placenta as suspected.

Fetal

This 4 lb. 3 oz. white female infant was limp and slow to breathe after the C-Section. Her one minute Apgar was five but rose to 10 in five minutes after suction, oxygen and stimulation. Cord blood was O negative and Coombs negative. Soon after arriving in the nursery she was noted to be cyanotic but pinked up quickly in oxygen in an isolette. Two hours later her pediatrician examined her and found nothing unusual. Because it was not possible to wean her from oxygen during the next four hours the diagnosis of respiratory distress syndrome was entertained. A portable chest X-ray showed "poor expansion of the lungs" and blood Ph was 7.37 (7.35-7.45) blood $PCO_2$45 (35-45). The infant was treated with I.V. $NaHCO_3$ in 5% G/W according to the Usher method and steadily improved. By 43 hours of life she was started on oral feedings of glucose water and I.V. fluids were stopped. During the third glucose water feeding the infant gagged, choked and became cyanotic again. With oxygen she "pinked-up" quickly. She was re-examined by the pediatrician who could find nothing. Twelve hours later she was weaned back to open air and restarted on oral feedings. (An I.V. started after the choking episode was discontinued.) Fifteen hours later she choked on a feeding of "half strength" formula. Thereafter her course quickly worsened with grunting, cyanosis and great respiratory distress. A repeat chest X-ray showed generalized clouding of the lungs. The diagnosis was now changed to "aspiration pneumonia." Despite oxygen and I.M. antibiotics the infant expired at 74 hours of age. An autopsy revealed: (1) Tracheal-Esophageal-Fistula of the "H-Type" (2) Myocarditis and Pericarditis (? Viral) and (3) Bilateral Lower Lobe Pneumonia (? Terminal).

Perinatal Committee Comments

1. Tetracycline is of questionable value in "Viral Pneumonia." It may have harmful effects on the baby and probably should be avoided in pregnancy if possible.
2. Suspected Rubella can be diagnosed as present or not by specific tests (i.e., Rubella HI Test). Follow-up titers can be done if desired.
3. The use of Gamma Globulin is of questionable value (at least in most OB quarters) for Rubella prevention. It may carry with it a slight risk of hepatitis or allergic reactions.
4. Respiratory difficulties with mucus and choking when swallowing in a newborn should alert one to the possibility of Tracheal-Esophageal-Fistula. Extreme care in feeding should be exercised.
5. In a respiratory distress problem it is better to treat with antibiotics early while awaiting cultures than to wait for obvious signs of infection.

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

Pulmonary Infarct Presenting as a coin lesion:

Case report and literature review

By Luis A. Tomatis, MD
Grand Rapids
Ray Miller, MD
Iowa City

Synopsis

Rarely pulmonary infarction will present as a coin lesion. Of 3,572 cases collectively reviewed, only five were caused by infarction. Although uncommon, infarction should be considered in the differential diagnosis of coin lesions of the lung. The definitive diagnosis can only be made by thoracotomy.

Proposed Definition

"Coin lesion of the lung" is a very widely used term that has escaped a precise accepted definition. Several articles refer to "solitary, circumscribed, intrathoracic lesions." Davis, et al,[2] in 1956 specified seven points: "The nodule must be six centimeters or less in diameter, must be solitary, must lie within pulmonary parenchyma surrounded by aerated lung, must be round or ovoid, must have margins which are circumscribed with a smooth contour, must be no cavitation or calcification, and must have minimal, if any, associated pneumonitis, atelectasis, regional lymphadenopathy, or other lung pathology." Davis did not require that the patients be asymptomatic.

Paulson[3] adds that the lesions may contain calcium and do not need to be sharply circumscribed.

Higginson and Hinshaw[4] specify that lesions should have no evidence of chest wall metastasis and limit the size to four centimeters or less in asymptomatic patients. No mention was made concerning calcific lesions, but they were apparently included in their series.

Thirty-two papers relative to coin lesions revealed several variances in criteria. Six authors established no criteria at all. Regarding shape, 16 stated that the lesions should be round or oval, six included slightly lobulated lesions, one included globular lesions, and one paper allowed them to be of any shape. Eighteen studies agreed that the lesions must be within the lung surrounded by well-aerated parenchyma. Fifteen stated that the lesions should be sharply demarcated with a smooth contour, but five investigators included fuzzy or irregular borders. Only four excluded calcification. Eight papers eliminated cavitation with only one specifically including cavitary lesions. One study allowed other pathology to be present within the lung while 16 specifically eliminated adjacent lung pathology. Asymptomatic patients or patients with only trivial symptoms were included in 10 of the studies. Lesion size was inconsistent among the many series published. Seven had no size restrictions, three limited size to one to four centimeters, three limited the size to one to five centimeters, seven set limits at six centimeters or less and 11 did not mention size in their paper.

It is evident by this review that the criteria of coin lesions are quite variable regarding size, shape, contour, symptoms, cavitation, calcification, and related pathology.

As such widely used denomination will hardly disappear from the medical lexicon, we propose to unify the above criteria defining a coin lesion as "a solitary pulmonary lesion, of sharp contour, not larger than four centimeters in diameter, round or lobulated, not cavitated or calcified, regardless if symptomatic or not." This definition

---

Doctor Tomatis is a thoracic and cardiovascular surgeon at Butterworth Hospital, Grand Rapids. Doctor Miller was formerly a resident at Butterworth, and is now an orthopedic surgeon at the University of Iowa Hospital.

will eliminate infiltrates, large tumor masses, TB active or calcified and cavitated tumors, to encompass only the granulomas, hamartomas, early primary tumors, single metastatic lesions and miscellaneous lesions like the one reported in this article.

Report of a Case

A 65-year-old white man was admitted 12/17/68 because of "swelling of his left leg." The patient related a history of left leg swelling with gradual onset over the previous three weeks. There was no history of fever, chills, cough, chest pain, dyspnea, hemoptysis or weight loss. He had never smoked. Past history did reveal an episode of phlebitis in the right leg 10 years prior to the present admission. One year before this admission the patient had a Modified Smith-Peterson nail and plate inserted into the left hip. Five months prior to admission he sustained a steering wheel injury to his chest resulting in fracture of one of the left lower ribs. No right chest pathology or rib fracture was noted at that time.

Physical examination revealed: BP 140/70, Pulse 88/min, Respiration 20/min, Temperature 37.3 degrees centigrade, Weight 79 Kilograms. The patient was in no acute distress. He had clear breath sounds, regular sinus rhythm without audible murmurs, A2 louder than P2. Abdominal examination demonstrated non-specific tenderness to palpation in the left, lower quadrant. The left leg was swollen with both the calf and thigh measuring three centimeters of circumference larger than the right. There was no leg pain, tenderness, erythema, nor positive Homan's sign. Pedal pulses were palpable and equal; however, there was evidence of mild stasis dermatitis changes bilaterally.

Admission laboratory studies included the following: Calcium 9.5mg%; Inorganic Phosphorus 3.0mg%; Fasting Blood Glucose 80mg%; BUN 19mg%; Uric Acid 7.0mg%; Cholesterol 190mg%; Total Protein 6.1GM%; Albumin 3.5GM%; Total Bilirubin 4.0mg%; Alkaline Phosphatase 60m& ml; LDH 150mU/ml; SGOT 38mU/ml; BSP Retention 23.1% up-take in 45 minutes; Creatinine 2.0mg%; Prothrombine time 23 seconds; CBC Hemoglobin 14.2 GM%; Hematocrit 44%; RBC Count 4.60 Cu mm; WBC 8,100 Cu mm, with 60% neutrophiles, 4% eosinophiles, 30%lymphocytes, 6% monocytes. Urine was clear with specific gravity of 1.006 and Ph of 5.0. EKG was interpreted as within normal limits.

Admitting diagnosis was left leg, deep vein thrombophlebitis with probable pelvic vein involvement. Therapy consisted of bed rest, leg elevation, compressive dressings, and heparinization beginning simultaneously with sodium warfarin and potassium phenoxymethyl penicillin. Two days after his admission he developed left calf erythema with tenderness and was thought to have developed superficial phlebitis. Fifteen days after admission the patient had no erythema, tenderness, nor swelling, and no left lower quadrant abdominal tenderness.

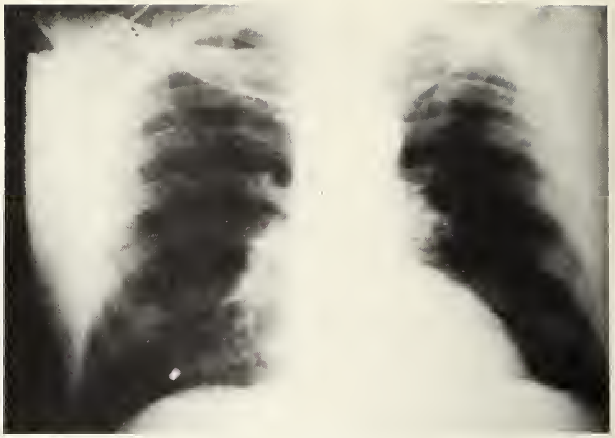


Fig. 1 Coin lesion in Right lower lobe. Metallic marker over right nipple.

An admission chest roetgenogram demonstrated "an area of infiltrative disease about one centimeter in diameter in the region of the right, middle lobe adjacent to the fifth rib anteriorly." (**Figure 1**) A previous study on 5/29/67 revealed no evidence of the density. Stereoscopic projections described "an oblong, well circumscribed, soft, homogenous density in the right lower lung field." Laminographic studies were interpreted as "a solitary, slightly irregular, pulmonary nodule without calcium. A neoplasm could not be excluded." (**Figure 2**)

Skin tests for histoplasmosis, tuberculosis, and coccidioidomycosis were negative. Sputum cultures and smears were negative. Barium enema, liver scan, and intravenous pyelogram with nephrotomograms were all interpreted as normal.

Since the patient had an asymptomatic coin lesion where malignant disease could not be excluded, a limited thoracotomy with wedge resection was performed on 1/7/69, resecting a one centimeter nodule from the superolateral aspect of the right lower lobe. Frozen section suggested organized hematoma so no further resection was performed. The permanent slides were interpreted as "organizing hemorrhagic infarct of the lung." (**Figure 3**) The patient did well post-oper-

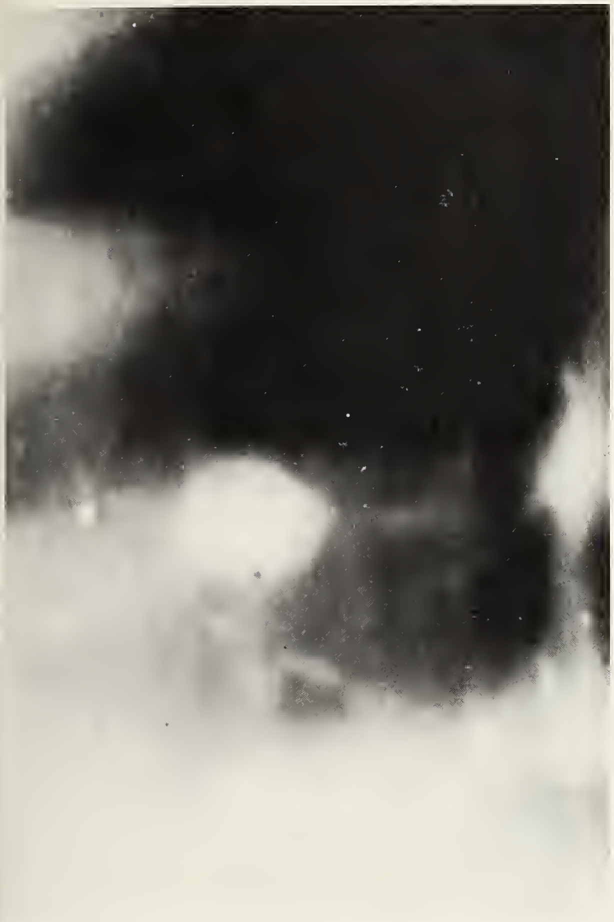


Fig. 2 Laminograms of coin lesion showing absence of calcium.

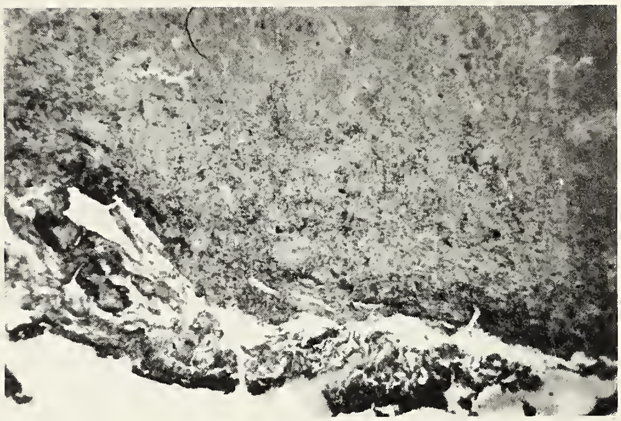


Fig. 3 H & E Stain—100 magnification: The margin of the pulmonary infarct showing the central hemorrhage necrosis with the organizing periphery.

atively and was discharged one week after surgery (1/15/69) on long term anticoagulant therapy.

Comment

As demonstrated by this patient, pulmonary infarcts can manifest as asymptomatic coin lesions which can not be clinically differentiated from malignant disease. The literature review reveals that pulmonary infarction presenting as a coin lesion is a very rare occurrence but must be considered in the differential diagnosis.

"Follow and observe" was for years the suggested approach to coin lesions, but more recently authors agree that thoracotomy should be performed as soon as possible to establish a diagnosis and begin early definitive therapy. Wolpaw[5] in 1952 stated, "it is emphasized that the existence of isolated, well circumscribed, intrathoracic nodules on routine roentgenographic examination of the chest may indicate the presence of significant disease. In particular, the possibility that the lesion represents an early phase in the development of bronchogenic carcinoma is to be considered. The asymptomatic character of the nodule, the absence of physical signs, and the apparent state of good health of the patient must not lead the physician to the false conclusion that the abnormality cannot be significant, and that it therefore does not require treatment. In the absence of exact diagnosis, or the ability to exclude malignant growth, exploratory thoracotomy for identification of the lesion is the only justifiable procedure." Effler,[6] et al, in 1948 agree that accurate pre-operative diagnosis is uncertain and usually impossible with facilities presently available. This conclusion is still factual today, 21 years later. Hood,[7] et al, and Steele[8] positively assert that "the likelihood that the mass is dangerous to the life of the individual is far greater than the risk of operation for the removal."

Holin,[9] et al, in a community-wide, chest roentgenogram survey from March to September of 1949 studied 673,218 patients with an over-all prevalence of the solitary, pulmonary nodules of one per 1,000 persons examined. In our literature review (**Table One**) of 3,572 coin lesions a total of five pulmonary infarcts were diagnosed. The number of malignant cases was 1315 or 36 percent.

Case Reports have been published concerning rare presentations of pulmonary infarction. Arora,[10] Starzl,[11] and Perkins[12] found one case each of "pseudotumors" caused by asymptomatic pulmonary infarction. Krause[13] stated, "In its protean manifestations this pathologic process can mimic almost any other lung disease."

Conclusions

Pulmonary infarction may masquerade as any pulmonary condition. The classical symptoms of pleuritic pain, cough, hemoptysis and the typical electrocardiographic changes are more often absent than present.[10] It should be noted, however, that the clinical signs and symptoms of an infarct are also the same for carcinoma of the lung in many cases. Both diseases can present without symptoms except the roentgenographic finding of a coin lesion.[14]

Higginson and Hinshaw[4] very aptly stated that "a coin lesion in the lung should be considered as one considers a small lump in the breast, i.e., as malignant until proven otherwise."

We conclude that if infarction is suspected in a non-smoker with thrombophlebitis below the age of 40 who presents with a coin lesion, a period of watchful waiting is probably justified. However, if the patient is over 40, a smoker, or both with an asymptomatic coin lesion, a limited thoracotomy is required for definitive diagnosis if the patient is a reasonable operative risk.

Pulmonary Infarct Presenting as a Coin Lesion
Literature Review of 3572 Coin Lesions

Table #1

Author and Date	Total Patients	# Malignant Lesions	% Malignant Lesions	# Pulmonary Infarcts
Thornton, Adams, Bloch 1944	23	17	73	0
Grow, Bradford, Mahon 1948	86	21	24	0
Effler, Blades, Marks 1948	24	4	17	0
O'Brien, Tuttle, Ferkaney 1948	21	9	43	0
Davis, Klepser 1950	67	37	55	0
Mahon, Forsee 1950	55	5	4	0
Husfeldt, Carlsen 1950	33	11	33	0
Sharp, Kinsella 1950	55	15	27	0
Bugden 1950	8	4	50	0
Effler 1951	16	7	44	0
Fink 1951	30	10	33	0
Abeles, Ehrich 1951	31	13	42	0
Hare, Battersby 1952	6	3	50	0
Wolpaw 1952	24	10	40	0
Cruichshank 1952	52	8	15	0
Condon 1952	27	18	67	0
Bell, Sealy 1952	23	12	52	0
Hood, Good, Clagett, McDonald 1953	156	55	35	0
Storey, Grant, Rothmann 1953	40	7	18	0
Jones, Cleve 1954	14	1	7	0
Springer, Geiger, Lanston 1954	20	13	65	0
Meckstroth, Andrews, Klassen 1954	70	27	39	0
Higginson, Hinshaw 1955	39	6	22	0
Cohen, Bartone 1955	9	2	22	0
Wilkins 1955	77	33	43	0
Davis, Katz, Peabody 1955	67	34	51	0
Franch, Pfotenhaner, Castagno, Mathewson 1956	36	4	11	0
Davis, Peabody, Katz 1956	215	101	47	0
Ford, Kent, Neville, Fisher 1956	124	65	52	0
Paulson 1956	167	78	47	1
Good, Wilson 1958	184	96	52	0
Taylor, Rivkin, Salyer 1958	236	23	10	1
Greer, Garey, Zuhdi 1959	85	37	44	0
Pischnotte, Sammons 1960	95	6	6	0
Pellett, Gale 1961	130	53	41	2
Edwards, Cox, Garland 1962	52	8	15	0
Steele 1963	887	316	36	1
Quinlan, Schaffner, Niltz 1963	40	11	18	0
Bateson 1965	155	95	61	0
Burdette, Evans 1965	66	22	33	0
Netterville 1966	6	5	83	0
Totals Series 40	3572	1315	36%	5

Bibliography

1. Graham, E. A., & Singer, J. J.: Three Cases of Resection of Calcified Pulmonary Abcess (or Tuberculosis) Simulating Tumor. *J. Thoracic Surg.* 6:173, 1936.
2. Davis, Edgar W., Katz, Sol, Peabody, J. Wonthrop: Surgical Implications of Solitary Tumors of the Lung. *Am. J. Surgery,* 89:402-406, 1955.
3. Paulson, Donald L.: Importance of the Pulmonary Nodule. *J. Thoracic and Cardiovascular Surg.,* 32:728-771, 1956.
4. Higginson, John & Hinshaw, David B.: Pulmonary Coin Lesion, *JAMA* 157:1607-1609, April 1955.
5. Wolpaw, Sidney E.: Diagnosis and Management of Asymptomatic Isolated Intrathoracic Nodules. *Ann. Int. Med.,* 37:489-505, 1952.
6. Effler, Donald: Solitary Lung Tumors. *Am. Rev. Tuberc.,* 63:252-254, 1951.
7. Hood, Robert T., Good, C. Allen, Clagett, O. Theron, & McDonald, John R.: Solitary Circumscribed Lesions of the lung, *JAMA,* 152:1185-1191, July 1953.
8. Steele, John D.: Solitary Pulmonary Nodule, *J. Thoracic & Cardiovascular Surg.,* 46: 21-38, 1963.
9. Holin, Sabine M., Dwork, Ralph E., Rikli, Arthur E., & Stocklen, Joseph B.: Solitary Pulmonary Nodules Found in A Community-Wide Chest Roentgenographic Survey. *Am. Review of Tuberc. and Pulmonary Disease,* 79:427-439, April 1959.
10. Arora, Yogesh C., Lyons, Harold A., & Cantor, Philip A.: Unusual Clinical and Roentgenographic Features of Pulmonary Infarction, *Am. Rev. Resp. Dis,* 82:232-239 Aug. 1960.
11. Starzl, T. E., Brittain, Robert S., Herman, Gilbert, Marchioro, Thomas L. & Waddell, William R.: Pseudotumors Due to Pulmonary Infarction, *Am. J. Surg.,* 106:619-627, Oct. 1936.
12. Perkins, Rex B., & Bradshaw, H. H.: Pulmonary Infarction Mistaken for Bronchogenic Carcinoma. *JAMA* 151:545-548, Feb. 1953.
13. Krause, George R.: Roentgen Diagnosis of Pulmonary Infarcts. *Radiology,* 45:107-119, Aug. 1945.

Arm Mends, Marcia Recovering

By C. R. Shelton
Detroit

Today, Marcia Grimm is enjoying a near-normal summer vacation from kindergarten classes. Her right arm does not function exactly as it did last winter, and her mother exercises her tiny fingers many times each day. But Marcia realizes that her arm is "getting better again" after her "adventure" at Henry Ford Hospital in Detroit.

What she does not realize is that she is the third person in recorded medical history to have undergone a successful arm replantation in the Detroit area.

The prelude to this six-year-old girl's four-week stay at Ford Hospital began in the yard of the George F. Grimm home near Gulliver, Michigan, last January 3 as she rode in a saucer sled tied to the rear of her father's tractor. The tractor was not moving, but its snow blower attachment was in operation. The sled slid against its blower and Marcia's right arm was pulled into the rotating blades.

Mr. Grimm reacted quickly; stopped the machine and carefully pulled Marcia's dangling arm out. He applied a tourniquet, hailed a State Police car which happened to be passing by, and rushed his daughter eight miles to the Manistique clinic of Merle Wahner, MD, a general practitioner.

After careful examination of the limb, Doctor Wahner decided against amputation. He placed calls for an air ambulance and nurse from Marquette, and contacted major hospitals in Wisconsin, Minnesota and northern Michigan. Airports in those areas were snowed in, but Detroit was open and Ford's Emergency Service advised him to get Marcia to them as rapidly as possible.

An ambulance met Marcia, her mother and the nurse at Detroit City Airport and rushed them to Ford Hospital. She entered the operating room seven hours after the freak accident.

More than five hours later, Marcia was wheeled out of surgery. Her arm had been replanted and the long road to recovery began.

Dozens of people contributed vitally to saving Marcia's arm, but since it is impossible to talk with them all, *Michigan Medicine* interviewed Edwin Guise, MD, the head of Ford's orthopedic team for Marcia's replantation.

During this interview, Dr. Guise repeatedly emphasized that the relatively short time between the accident and replantation surgery was a deciding factor in this case.

"Without the dedication of Dr. Wahner, and his sincere concern for getting the patient to a hospital equipped for replantation, there is no doubt that Marcia would have lost the arm," Dr. Guise stated.

"After Dr. Wahner's call, and before Marcia arrived here, the emergency room team was prepared, and the vascular and orthopedic teams were standing by.

"Following X-rays," Dr. Guise continued, "we found that her right humerus was shattered in an oblique fracture just below the shoulder. Only the median and ulnar nerves were intact, though both were badly stretched."

The arm was washed, and the distal arm was irrigated with cooled heperin solution. There was good transfer of the solution from the severed artery through the limb and out through multiple veinous channels.

This provided the first evidence that there had been no clotting of blood inside smaller arteries of the arm.

Dr. Guise believes the lack of clotting may have resulted from the cold weather, and from the rapid laceration which may have caused residual blood to pool out quickly so that no blood remained to clot during the seven hours before she entered surgery.

He added that if clotting had occurred, it is unlikely the replantation would have been so successful.

"She then was placed under anesthesia. The arm was scrubbed and prepped as for any regular operation, and the wound was cleaned of crushed tissue.

C. R. Shelton, the author, is employed by Parke-Davis and does some free lance communications work for MSMS.

"After we established that there was good circulation through the arm, we removed small chips of bone, and trimmed the humerus so it could be fit together quite stably.

"At this point it was necessary to get a solid fixation of the humerus as rapidly as possible. This, of course, made it possible to re-establish blood supply without putting strain on the arteries and veins when they were anastomized."

Two small rods were placed from the elbow up through the humerus which fixed the bone adequately, preventing rotation and/or bend of the fracture.

"At this point, we were able to turn the case over, temporarily, to the vascular surgeons."

These specialists carefully trimmed back the artery and veins, and stripped them of anything that could produce contraction.

After one major vessel and three veins were anastomized, circulation was started through the arm. There was the usual blood loss around the area where the arteries and veins were anastomized, and subsequent smaller veins were tied off.

"Temporarily there was a great deal of swelling of the replanted arm, and the swelling was hard. However, within one-half hour it became softer. Subsidence of swelling convinced us not to cut the overlying tissue on the arm below the elbow.

"We then found the radial nerve endings and brought them back together with two steel sutures. No real attempt was made to join the nerve ends anatomically. We used steel sutures to insure ready location of the ends at a later date. This was done with the idea of preventing the nerves from retracting out of the field and scaring down."

All tendons and muscles were anastomized and the median and ulnar nerves were placed in their normal compartments. A drain was placed in the wound, and the child was put in a cast after the skin was sutured very loosely.

Dr. Guise indicated that one difficulty with all replantations is that after arteries and veins are joined well, the lymphatic drainage—with its multiple systems throughout the body—has to drain out of the wound until normal body healing can be re-established in the lymphatic drainage system. This was the reason for closing Marcia's wound loosely.

Doctor Guise

Marcia Grimm, six-year-old girl from the Upper Peninsula, who is regaining active muscle function in her right arm, which was mangled last winter in a snowblower accident.

The little patient drained a small amount of lymphatic drainage and blood for about three days, and stopped. She granulated in.

At the end of her first night in the hospital, Marcia had good pulses at the wrist. Her fingers and forearm were soft. She continued to have good pulses in the arm, her fingernails were pink, but she had no sensation in the arm.

"She was kept in bed for about two weeks until skin grafts were performed on her arm and hand. In her accident, she had a loss of skin in an area of one-half by one inch in the region of the skin wound. She also lost some skin over the back of her hand where another blade of the snow blower had injured her.

"We kept her in bed for a week after the grafts, then started ambulating her in a shoulder spica cast. After the skin graft sutures were removed, she was discharged home.

"Six weeks after discharge, we saw her again. The wounds were healed and she had no pain, but she told us that she 'felt something' near her elbow.

"After the lapse of another six weeks, she was levering her elbow against the cast with her shoulder muscles, and her wrist was moving. However, we could get no voluntary contraction.

"She again told us that she had feeling in her arm, but since she is such a young child and we could establish no objective evidence of this, we felt she was experiencing phantom pain."

Early in May, she was re-admitted for work on the radial nerve.

"We removed the cast and X-rayed her. The fracture had started to heal, and we prepared for surgery on the radial nerve.

"During the pre-operative evaluation, it became obvious that she did have muscular power at the elbow and could flex and extend her elbow about 30°. This, of course, was due to the healing of the repaired muscles and tendons.

"To our surprise, she actually could extend and flex her wrist and had sensations in the palms of her hand, especially on the ulnar surface. Also she could lift her fingers, not the distal ends, but the metacarpophalangel joints.

"Electromyographs and stimulating studies of various kinds were completed. We found that the radial nerve, which was considered incapable of healing until it could be joined surgically, was healing to some extent. It had progressed down to one set of muscles in the forearm and was working better than the ulnar and median nerves that had only been stretched.

"Surgery was cancelled. We placed her in a sling and sent her home, asking her family doctor to exercise and stimulate the muscle units in the forearm."

On June 8 Marcia returned to Ford Hospital for another check-up.

Dr. Guise reported that she has regained active muscle function, both flexion and extension, at her elbow and that the humerus has healed. She now is allowed out of the sling for exercise.

"There also is evidence of return of ulnar nerve function, including wrist and hand; return of median nerve function with sensation to the palm, but not to the fingers; and radial nerve motor power and sensation to her wrist, but not to the hand. Additionally, pulses in her hand and wrist are normal.

Dr. Guise will see her again in the fall.

The replantation team is extremely pleased with this case, since it seems so successful. But it only illustrates very well that application of standard techniques in a team approach to special problems can create a gratifying conclusion. Rapid delivery of needed medical services by the entire community of physicians and paramedical service has helped to produce a useful arm for little Marcia.

Appeals for Organized Regional Emergency Plan

The need for an organized emergency referral service, possibly on a regional basis, was sounded firmly by Edwin Guise, MD, during this interview.

He states that at the present time there is no organized way of getting a badly injured patient, who is in a remote area, to a hospital equipped to handle the emergency. Neither are there specific courses for physicians in rural locations to follow when they need immediate specialized assistance.

Doctor Guise believes that a carefully planned and well publicized emergency care service should be established so that physicians, and the general public, would know how to arrange swift transfer of patients to hospitals with orthopedic, and other teams organized to provide wide ranges of specialized surgical services.

He feels this could be accomplished on a Tri-State (Michigan, Wisconsin and Minnesota) Regional basis, with helicopter ambulance service available throughout the region. A directory of which hospitals offer what emergency care, their phone numbers, and how to obtain an air ambulance quickly could be provided to every physician in the region. The same directory could explain how and where best to obtain immediate specialized consultation.

Also, the emergency transfer service could be publicized to the public through listings in the Yellow Pages, newspapers, and other publications to assist anyone who is arranging the speedy evacuation of a patient to a qualified hospital.

"Let's get together and solve this need," Doctor Guise requests.

Campbell's Soups...
wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help —for these four very good reasons:

Appeal With a variety of tastes, textures, aromas, and colors, Campbell's Soups can add interest and appetite appeal. And they're easy to eat—ingredients are tender, bite-size. Many patients on special diets will find soups they can enjoy among the more than 50 different varieties available.

Nourishment Campbell's Soups contain selected meats and sea foods, best garden vegetables—carefully processed to help retain their natural flavors and nutritive values.

Convenience Within 4 minutes a bowl of delicious soup is heated and ready to eat.

Economy Campbell's Soups are inexpensive—an important consideration to those whose budgets are limited.

Recommend Campbell's Soups . . . and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*

Campbell's
CONDENSED
SOUP

You can't
treat one
without
the other.

A triumph over trichomoniasis

The male urogenital tract is by far the main source of reinfection in trichomonal vaginitis.

It follows that neglecting to treat infected male partners of women with trichomonal vaginitis invites therapeutic failure.

Just as Flagyl is the best agent available for eradicating trichomonal infection from extravaginal sites in women, it is the only agent capable of eradicating demonstrated trichomonal infection in men.

Because of published reports of consistently high cure rates—often up to 100 percent—and a relatively low incidence of side effects, Flagyl has become the agent of choice for trichomonal vaginitis.

Indications: For the treatment of trichomoniasis in both male and female patients and the sexual partners of patients with a recurrence of the infection provided trichomonads have been demonstrated by wet smear or culture.

Contraindications: Evidence of or a history of blood dyscrasia, active organic disease of the central nervous system and the first trimester of pregnancy.

Warnings: Use with discretion during the second and third trimesters of pregnancy and restrict to patients not cured by topical measures. Flagyl (metronidazole) is secreted in the breast milk of nursing mothers. It is not known whether this can be injurious to the newborn.

Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. There is no accepted proof that Flagyl is effective against other organisms and it should not be used in the treatment of other conditions. Exacerbation of moniliasis may occur.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, drowsiness, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, vaginal burning, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified.

Dosage and Administration: *In the Female.* One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during and after treatment are recommended. Vaginal inserts of 500 mg. are available for use, particularly in stubborn cases. *When the vaginal inserts are used* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male.* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

Dosage Forms: Oral tablets 250 mg.
Vaginal inserts 500 mg.

References available on request.

Flagyl®
metronidazole

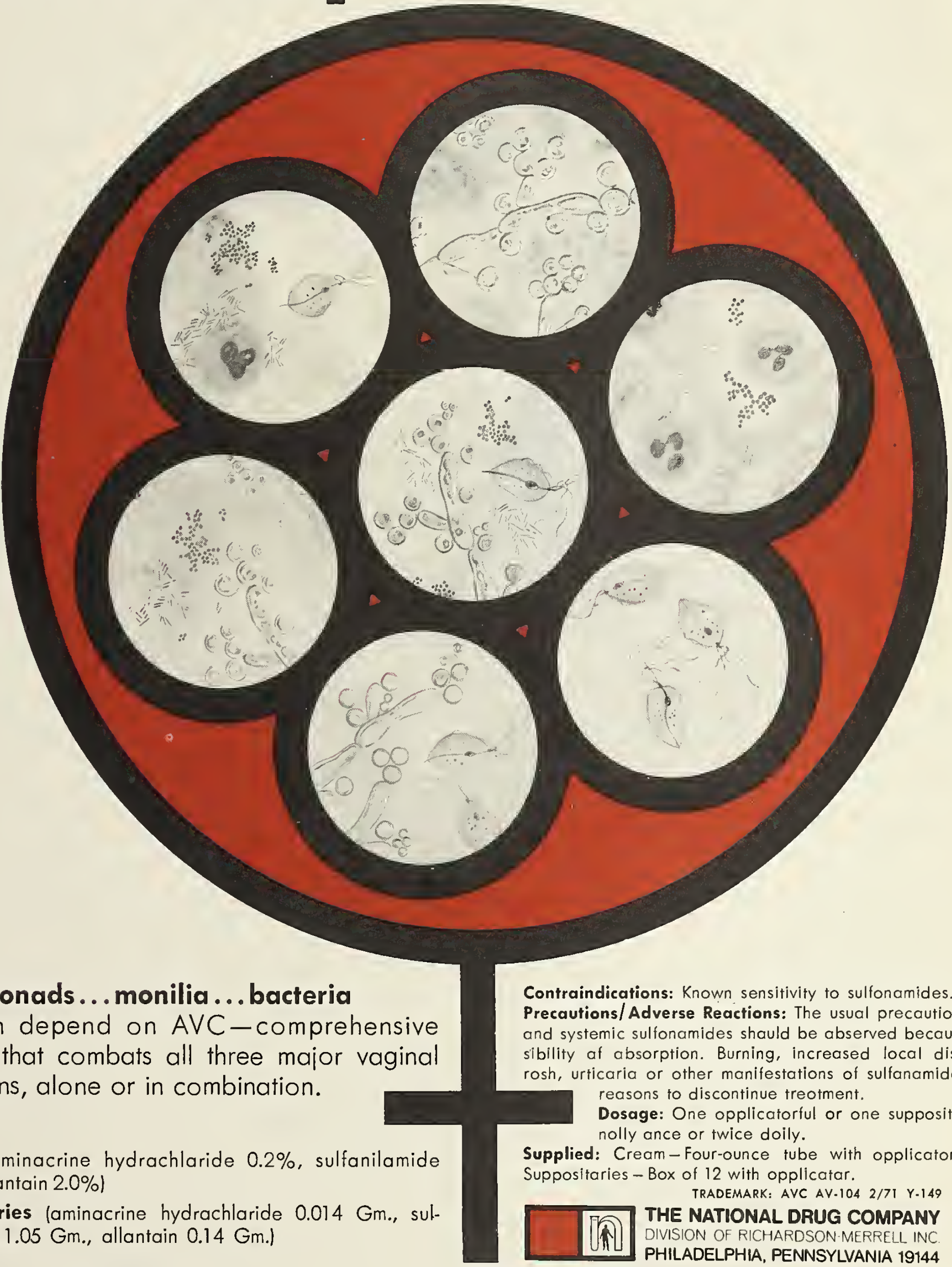
care for the pair
in trichomoniasis

SEARLE

Distributed by
G. D. Searle & Co., P.O. Box 5110, Chicago, Illinois 60680
Research in the Service of Medicine

Thorazine®
brand of chlorpromazine
versatility
quality
experience
NOW THERE'S PRICE
Smith Kline & French Laboratories SK&F

The causes of vaginitis are multiple



Trichomonads . . . monilia . . . bacteria

You can depend on AVC—comprehensive therapy that combats all three major vaginal pathogens, alone or in combination.

AVC

Cream (aminacrine hydrochloride 0.2%, sulfanilamide 15.0%, allantoin 2.0%)

Suppositories (aminacrine hydrochloride 0.014 Gm., sulfanilamide 1.05 Gm., allantoin 0.14 Gm.)

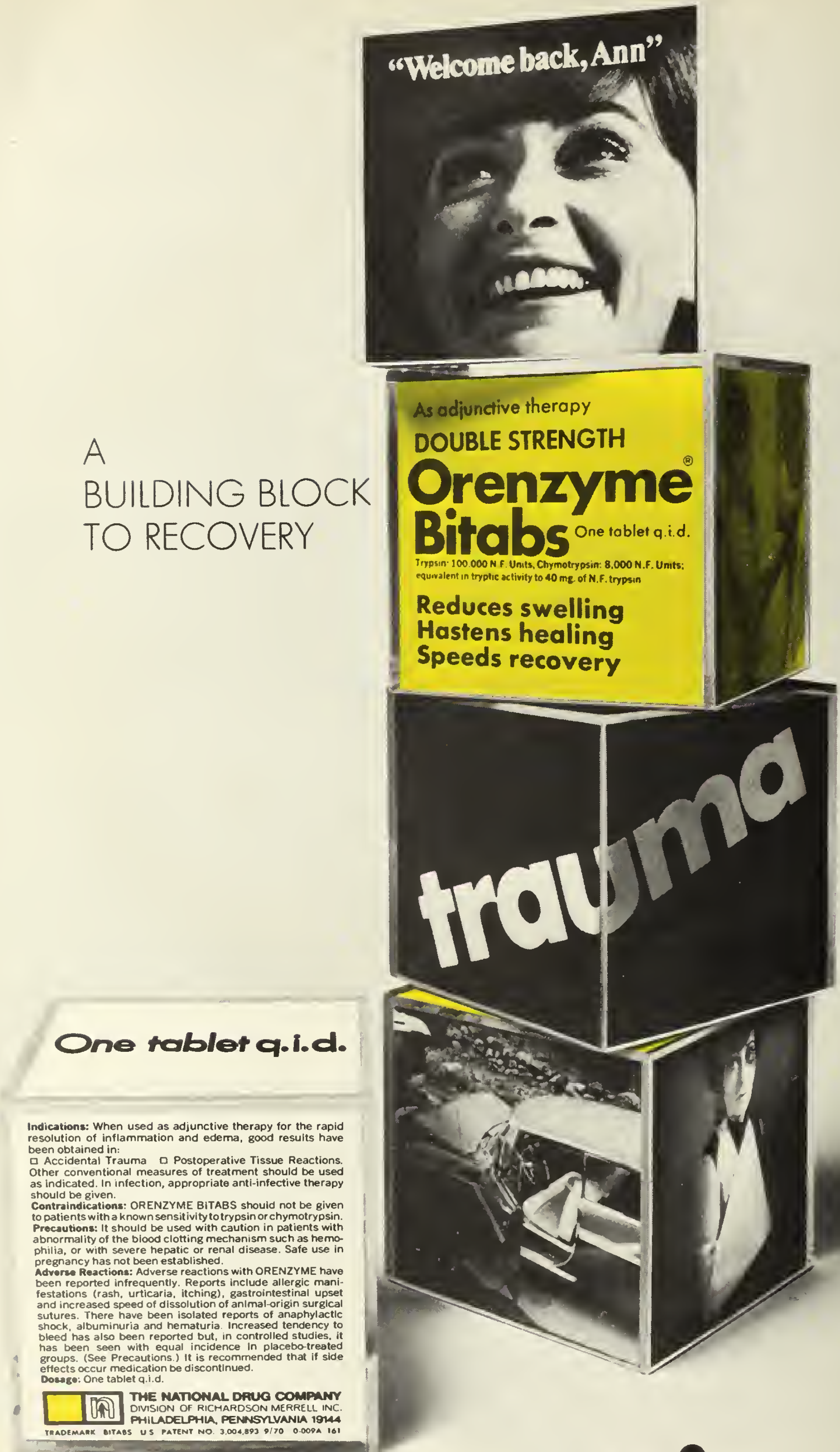
Contraindications: Known sensitivity to sulfonamides.
Precautions/Adverse Reactions: The usual precautions for topical and systemic sulfonamides should be observed because of the possibility of absorption. Burning, increased local discomfort, skin rash, urticaria or other manifestations of sulfonamide toxicity are reasons to discontinue treatment.
Dosage: One applicatorful or one suppository intravaginally once or twice daily.
Supplied: Cream—Four-ounce tube with applicator. Suppositories—Box of 12 with applicator.

TRADEMARK: AVC AV-104 2/71 Y-149

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

AVC

The treatment is singular


"Welcome back, Ann"
As adjunctive therapy
DOUBLE STRENGTH
Orenzyme®
Bitabs
One tablet q.i.d.
Trypsin: 100.000 N.F. Units, Chymotrypsin: 8,000 N.F. Units; equivalent in tryptic activity to 40 mg. of N.F. trypsin
Reduces swelling
Hastens healing
Speeds recovery
trauma
One tablet q.i.d.

A
BUILDING BLOCK
TO RECOVERY

Indications: When used as adjunctive therapy for the rapid resolution of inflammation and edema, good results have been obtained in:
☐ Accidental Trauma ☐ Postoperative Tissue Reactions. Other conventional measures of treatment should be used as indicated. In infection, appropriate anti-infective therapy should be given.
Contraindications: ORENZYME BITABS should not be given to patients with a known sensitivity to trypsin or chymotrypsin.
Precautions: It should be used with caution in patients with abnormality of the blood clotting mechanism such as hemophilia, or with severe hepatic or renal disease. Safe use in pregnancy has not been established.
Adverse Reactions: Adverse reactions with ORENZYME have been reported infrequently. Reports include allergic manifestations (rash, urticaria, itching), gastrointestinal upset and increased speed of dissolution of animal-origin surgical sutures. There have been isolated reports of anaphylactic shock, albuminuria and hematuria. Increased tendency to bleed has also been reported but, in controlled studies, it has been seen with equal incidence in placebo-treated groups. (See Precautions.) It is recommended that if side effects occur medication be discontinued.
Dosage: One tablet q.i.d.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144
TRADEMARK BITABS U.S. PATENT NO. 3,004,893 9/70 0-009A 161

Orenzyme® Bitabs

Trypsin: 100,000 N.F. Units, Chymotrypsin: 8,000 N.F. Units; equivalent in tryptic activity to 40 mg. of N.F. trypsin

This "case history" runs to some 10,000 pages

This is a typical "case history" of one new drug – or, rather, a proposed new drug – assembled for submission to the U.S. Federal Food and Drug Administration. These volumes are the result of several years' work by thousands of professional and skilled personnel in just one pharmaceutical company's research laboratories, and by hundreds of physicians in medical schools, hospitals, and private practice. They cover every aspect of experience with this proposed new agent from chemical laboratory to clinic, from mouse to man. Each volume could conceivably represent hundreds of thousands of dollars of financial investment, countless hours of human effort. This veritable mountain of data stands behind every new agent offered to you by pharmaceutical manufacturers – a reassuring testimonial to the efficacy, safety and purity of the drugs you will prescribe today to lower the cost of disease to your patients.

Pharmaceutical Manufacturers Association
Pharmaceutical Advertising Council
1155 Fifteenth St., N. W., Washington, D.C. 20005

This message is brought to you as a courtesy of this publication on behalf of the producers of prescription drugs.

in stable adult diabetes, if diet alone fails...

start with DBI®-TD (phenformin HCl)

timed-disintegration capsules 50 mg.

A Distinctive Oral Hypoglycemic

---

a biguanide... not a sulfonylurea

Lowers elevated blood sugar without increasing endogenous insulin secretion.

Probably, secondary to its hypoglycemic effect, decreases insulin oversecretion. This may help to reduce lipogenesis and facilitate lipolysis, which may account for the clinically reported loss of excess body weight and lowering of elevated serum cholesterol levels in overweight, hypercholesteremic, stable adult diabetics unresponsive to diet alone.

DBI®-TD
(phenformin HCl)
timed-disintegration capsules 50 mg.

lowers elevated blood sugar

How to prescribe DBI®-TD (phenformin HCl)

To start with DBI-TD

Week 1	1 capsule with breakfast may be effective, or a second capsule may be given with the evening meal.
Week 2	Continue effective DBI-TD dosage. If necessary, add an additional capsule to the A.M. or P.M. dose.
Thereafter	Continue effective DBI-TD dosage.

To transfer from sulfonylurea therapy to DBI-TD alone: The first week, withdraw sulfonylurea; start with DBI-TD as indicated in the chart.

To transfer from sulfonylurea therapy to combined therapy with DBI-TD: The first week, continue dosage of sulfonylurea; add DBI-TD as indicated in the chart. When effective regulation of diabetes is attained, sulfonylurea may be reduced and/or withdrawn.

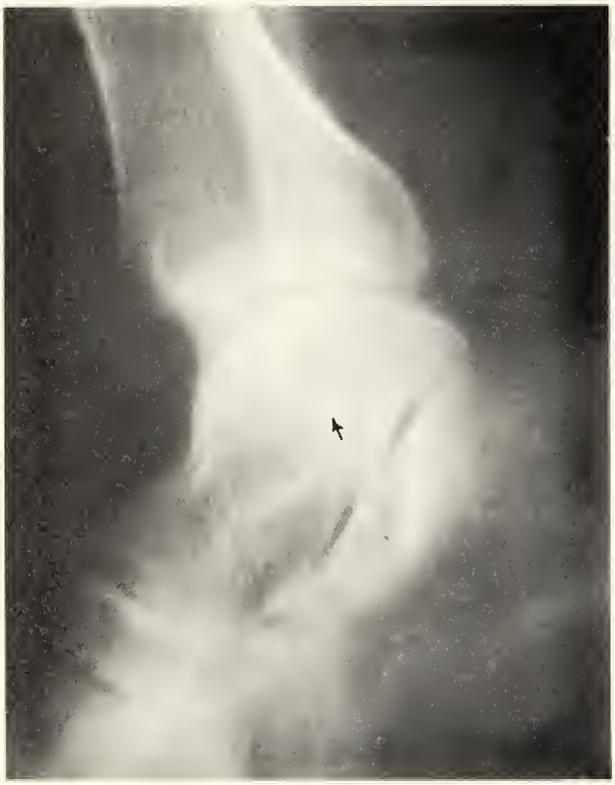
Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary. **Contraindications:** Diabetes mellitus that can be regulated by diet alone; juvenile diabetes that is uncomplicated and well regulated on insulin; acute complications of diabetes (metabolic acidosis, coma, infection, gangrene); surgery; severe hepatic disease; renal disease with uremia; cardiovascular collapse, after disease states associated with hypoxemia. **Warning:** Use during pregnancy is to be avoided. Until adequate data on the effects of DBI on the human fetus are available, such use can be considered experimental. **Precautions: Starvation Ketosis,** which must be differentiated from "insulin lack" ketosis, and is characterized by ketonuria in spite of relatively normal blood and urine sugar, may result from excessive DBI therapy, excessive insulin reduction or insufficient carbohydrate intake. Adjustment of DBI-TD or insulin dosage, or supplying carbohydrates, alleviates this state. DO NOT GIVE INSULIN WITHOUT FIRST CHECKING BLOOD AND URINE SUGARS. **Lactic Acidosis:** DBI is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, it is recommended that periodic determinations of ketones in the blood and urine be made in diabetics previously stabilized on DBI, or DBI and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH and the lactate-pyruvate ratio. DBI should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis. **Hypoglycemia:** Although hypoglycemic reactions are rare when DBI is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with DBI. **Adverse Reactions:** Principally gastrointestinal, occurring more often at higher dosage levels; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, DBI should be immediately withdrawn. Although rare, urticaria and gastrointestinal symptoms following excessive alcohol intake have been reported. **Dosage:** 1 to 3 DBI-TD 50 mg. capsules daily. **FSN 6505-724-6331. Also Available:** DBI tablets 25 mg. **Supplied:** Bottles of 100 and 1000.

USV PHARMACEUTICAL CORP., Tuckahoe, N.Y. 10707 USV

Doctors, expand your knowledge about radiology by studying this monthly column prepared by the chief radiologist at Detroit Memorial Hospital.

The Viewbox

Raymond S. Kurtzman, MD
Detroit



Diagnosis

Osteoid osteoma.

X-Ray Findings

There is a small sclerotic nidus in the talus (laminograms of ankle).

Discussion

Osteoid osteoma is best considered a benign tumor of osteoblastic origin occurring mainly in relatively young people. It can involve almost any bone, including ribs and spine, but tends to select the lower extremities. The lesion is usually quite small, almost always less than one cm. in diameter. The nidus can be radiolucent or sclerotic. When a cortex is involved, there is generally a large area of reactive sclerosis and even expansion of bone. The main symptom of osteoid osteoma is pain, which is progressive and can be quite severe. Typically the pain is most severe at night and strangely but characteristically is relieved by aspirin. Cure depends on the removal of the small provocative nidus.

Reference

Lichtenstein, L., *Bone Tumors.* The C. V. Mosby Company, St. Louis, 1965, pp 90-103.

MSMS Highlights 10 years ago

—A five-year President's Program, to extend to the MSMS Centennial Celebration in 1965, was instituted by the 1960 House of Delegates, with the purpose of attempting to increase the life expectancy of people of Michigan by five years, and to increase the potential productivity and usefulness of the later years of life.

—A highlight of the 1961 annual state conference of the Michigan Health Council was the establishment of the Health Hall of Fame. The first five persons elected to the Hall were the late Fernald Foster, MD; the late W. K. Kellogg, MD; Frederick A. Coller, MD; Thomas Francis, Jr., MD; and William J. Norton.

MSMS Highlights 25 years ago

—The first annual Conference of Presidents and other officers of State Medical Associations was called by A. S. Brunk, MD, Detroit. Dr. Brunk was elected president at the conference, attended by 208 persons.

—The Michigan plan for furnishing home office medical care to veterans, by use of the hometown medical doctors, was called another "First for Michigan, to quote the phrase which has become a byword in medical circles outside this state," said The Journal of MSMS.

—The AMA, at an "epochal meeting," Feb. 12 in Chicago announced the development of a nation-wide voluntary plan of prepaid group medical care. The voluntary sickness insurance plan was built around locally administered medical care plans already existing in 25 states, including Michigan Medical Service.

Sprigg **Subber** **Awtubb** **Widder**

codes **hayfeber** **allerdgies** **"flu"**

relieve them all with all-season ISOCLOR®

timesule® tablet liquid

TWO ACTIVE COMPONENTS
give "four season" sufferers dependable relief

Chlorpheniramine Maleate dries runny noses and eyes, quiets sneezing, wheezing, soothes itching and reduces postnasal drip—all with a particularly low index of side effects such as drowsiness.

Pseudoephedrine HCl: decongests throughout *entire* respiratory tract, opening nasal passages, dilating bronchioles, relaxing "tight chest"—as effectively as ephedrine, but with much less CNS or cardiovascular stimulation.

COMPOSITION: Each tablet or 10 cc. (2 teaspoonsful) of liquid contains:

Chlorpheniramine Maleate	4 mg.
Pseudoephedrine HCl	25 mg.

Each Isoclor Timesule contains:

Chlorpheniramine Maleate	10 mg.
Pseudoephedrine HCl	65 mg.

In a special pellet form providing both prompt and sustained effect.

INDICATIONS: For relief of upper respiratory and bronchial congestion associated with: the common cold, hay fever and allergies, sinusitis, influenza, and vasomotor and allergic rhinitis.

CONTRAINDICATIONS: Sensitivity to antihistamines or sympathomimetic agents. Severe hypertension or severe cardiac disease.

PRECAUTIONS: Use with caution in patients with hyperthyroidism. Patients susceptible to the soporific effects of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CAUTION: Federal law prohibits dispensing without prescription.

SUPPLIED: Tablets: Bottles of 100; Liquid: Pints and gallons; Timesules: Bottles of 50, 250, and 1000.

DOSAGE AND ADMINISTRATION:	Tablets	Liquid	Timesule
Adults:	1 q. 3-4 h.	2 tsp. q. 3-4 h.	1 q. 12 h.
Children 6-12 years:		1 tsp. q. 3-4 h.	
40-50 pounds:		¾-1 tsp. q. 3-4 h.	
30-40 pounds:		½-¾ tsp. q. 3-4 h.	
20-30 pounds:		¼-½ tsp. q. 3-4 h.	
15-20 pounds:		⅛-¼ tsp. q. 3-4 h.	

A S

ARNAR-STONE LABORATORIES, INC.
Mount Prospect, Illinois, U.S.A. 60056
Subsidiary of American Hospital Supply Corporation

Consider the Consultation

David S. Greenbaum, M.D.
Director, Continuing Medical Education
Associate Professor of Medicine
College of Human Medicine
Michigan State University

The consultation is usually considered to be "a deliberation between physicians on a case or its treatment."* Frequently, it can lead to the expeditious diagnosis and effective treatment of the patient's problem and serve as a potent and stimulating educational experience for the referring physician and the consultant. Other considerations include the partial diffusion of responsibility and the reassurance which the consultant frequently gives to the patient, his family and to the patient's primary physician. Unfortunately, the consultation sometimes becomes a series of non-communications and misunderstandings leading to dissatisfaction of the patient, referring doctor and consultant.

As in most interpersonal relationships, communication is a major determinant in the success of many consultations. This is especially true in complex cases which require multiple and continuing decisions. The consultant should understand what is expected of him and, when possible, the patient should know this too. Is the purpose for complete transfer of patient care, is it for a "one shot" evaluation or procedure or is it for ongoing advice? Are there specific questions that want answering? Except in "routine" types of consultation or self-evident situations, the referring physician would do well to personally contact the consultant by letter or by telephone to give the background data and delineate the reason for the consultation. If little information can be given to the consultant by these routes, data should be made easily accessible to him so that repetition of tests and the need for letters requesting information about past workups is avoided. Such concern seems timely in this period of mounting criticism directed at the Health Profession because of alleged inefficiency and unbridled costs. Office assistants and ward personnel might be instructed to see that the pertinent data are available. Check lists to focus on the type of information needed by the consultant might sometimes be helpful.

The consultant, in turn, has the obligation to relate appropriately to the patient and not to undermine the relationship with the primary physician. He may have to use fine judgment in determining just how much he should tell the patient and perhaps the patient's family of his findings, interpretations and recommendations. The phraseology may have to be such that the primary physician is not "locked into" a position where he cannot alter the consultant's recommendations if this seems to be desirable. Such problems sometimes can be minimized by a previous discussion on this point between consultant and primary physician. The referring physician's questions should be answered and recommendations should be promptly communicated to him. At this point, any continuation of the consultant's role in the case should be clarified if need be.

The small amount of "extra" time spent seeing that proper information reaches the consultant in time to make the consultation effective and efficient should save not only the patient and consultant time, but ultimately, everyone's money and catecholamines.

---

*Webster's *Seventh New Collegiate Dictionary*

Doctor Greenbaum is the director of Continuing Medical Education and Associate Professor of Medicine at the MSU College of Human Medicine.

For Your Library

Copies of "A Century of Service in Medicine," published as a Centennial highlight by MSMS, are still available for cost, $2.00. The book, bound handsomely in blue, was written by Wm. J. Stapleton, Jr., M.D., of Detroit, the MSMS Historian. To obtain a copy, write to MSMS, 120 West Saginaw, East Lansing, and enclose a check.

imagine, the Michigan State Medical Society
two week ORIENT ADVENTURE vacation costs less
than tourist class air fare to the same destinations yet includes —

- the best DELUXE HOTELS
- TWO gourmet meals per day at a selection of finest restaurants
- direct WORLD AIRWAYS 707 private jet
- five ORIENT ADVENTURE hosts to assist you
- TRANSFERS OF ALL BAGGAGE — 100 pounds baggage allowance
- plus many other special features

ENJOY seven days in TOKYO — seven days in HONG KONG
optional trips to Kyoto and Bangkok.
ORIENT ADVENTURE is YOUR vacation . . .
sightsee . . . shop . . . golf . . . nightclub . . . relax
there is absolutely NO REGIMENTATION.

NEVER has there been a *vacation value* like our ORIENT ADVENTURE.

RETURN THIS COUPON NOW!

Michigan State Medical Society
Box 950, East Lansing, Mi. 48823

Enclosed is my check for $______ ($100 per person)
as ORIENT ADVENTURE deposit

NAME ______________________
ADDRESS ______________________
CITY ______________ STATE ______________
ZIP ______ PHONE ______________

Orient Adventure $898

Plus $35. Tax and Service

DEPARTING DETROIT — OCTOBER 11 — SOLD OUT
DEPARTING DETROIT — NOVEMBER 4 — SPACE AVAILABLE

Your opinion please

"The threat of a malpractice lawsuit has become an increasing hazard in nearly every physician's practice. It is reflected in the defensiveness with which the physician must conduct his practice and in the subsequent higher cost to the patient for increased tests and consultation. Can you suggest any solutions to the problem?"

Fredrick Weissman, MD
Southfield

Having been engaged in private practice of Plastic Surgery for 13 years in the Metropolitan Detroit Area, and having worked on the Insurance Studies Committee for approximately 10 years, I have seen the development of increasing malpractice litigation, skyrocketing malpractice awards, and insurance premiums.

Solutions to the problem start first with each doctor's recognition, that acts of malpractice DO occur. A suit against the doctor for an act of malpractice, basically, is the fundamental means that the laity has at its command for assuring themselves of competency in the delivery of medical and surgical care.

Each doctor, as he recognizes that every patient harbors a potential malpractice suit, would then try harder (defensively) to avoid committing any breach. As he identifies closer to the doctor-patient relationship, and works towards fully establishing such a closer relationship, then many of the so-called bad result or nuisance cases, or malpractice litigations would be avoided.

In my practice, I attempt to avoid the problem of malpractice litigation by beginning with the initial appointment, and allowing enough time for adequate consultation. If, despite this, adequate time is not obtained, then the patient is requested to return for review, and further discussion of their particular problem. This is possible in Plastic Surgery where the nature of the work, for the most part, is elective. It is at this consultation time that the doctor-patient relationship is established. If I suspect that the patient does not really understand the limitations of the anticipated surgery, then I feel that I must decline the case, and suggest that the patient seek plastic surgery elsewhere.

It is at the time of discussing the informed consent form, which I do directly with the patient, that many of these questions occur, and can be handled. I do not delegate this function because it often times is revealing of the patient's imaginative goals. I feel it is far better to avoid entering into a surgical contract with a patient that indicates beforehand, that they cannot be satisfied, than to plunge ahead with the surgery, thinking that I am still capable of making them satisfied.

Further, if the case is operated upon, and less than optimal results or complications are noted, then I am sure to let the patient know of my concern, and what I am doing and intend to do to bring about improvement. I strive to assure them that I have a personal interest in their well-being and result, and am doing all that can be done to bring about a better condition.

Further solutions to the overall problem will evolve through changes in the law regarding malpractice, and closer cooperation between the local medical societies with strong and socially minded insurance carriers.

John G. Slevin, MD
Grosse Pointe

The past decade has seen the problem of malpractice insurance become a major concern to practicing physicians. There are three facets to this problem. They are (1) availability; (2) cost; and (3) harassment by suits without merit.

Unlike Hawaii and some other states, we in Michigan can get professional liability coverage. However, few companies are writing malpractice insurance in this state. Also, some companies have withdrawn underwriting such insurance with little notice to the policy-holder and some others have arbitrarily dropped policy-holders for age, etc., despite a good record. The Professional Liability Committee of MSMS has urged the State Insurance Commissioner to take a strong stand, as happened in Pennsylvania, to stop such arbitrary practices and to require all national underwriters who operate in Michigan to offer their complete line of casualty insurance, including professional liability, or to deny them a Michigan franchise.

Although cost of liability protection is high and has been soaring, it seems to be leveling off in Michigan. The AMA is moving now toward group malpractice insurance. This could stabilize cost. However, more importantly, both the Federal and Michigan governments are now concerned with such costs and have undertaken serious study of the problem. Government has found that insurance costs increase the physician's overhead and hence the fees he must charge, including fees for Medicare and Medicaid.

The best preventative for being a target for malpractice suits is to practice good medicine, keep careful records, maintain a good rapport with patients and to teach residents, nurses, including your office nurse, to be discreet in talking in the presence of or to patients. Attorneys tell us most malpractice suits start after some "smart" resident or other medical personnel, made disparaging remarks to patients about the attending physician or the treatment rendered. This is also true in speaking to relatives of patients.

Another source of the suit "without merit" is the young attorney who seeks a "fast buck" at little trouble to himself, by instituting suit without prior investigation. Since it costs $5,000 or more to defend a malpractice case, it is good business for the insurance carrier to settle suits out of court as cheaply as possible. Unfortunately, such settlements encourage some lawyers to file more so-called nuisance claims.

How to stop this kind of legal "holdup" is a problem. The solution must come from the legal profession. Now that attorneys are being sued more frequently for malpractice and their premium costs are rising, we may expect better cooperation from the Bar to discipline those responsible for initiating such suits that are without merit.

The "contingent fee" has been blamed for many such suits. It is a legitimate legal practice to work on a contingent fee basis. Let us, in medicine, stop telling lawyers how to practice law. It is not the way to win friends and influence lawyers!

William P. Marshall, MD
Kalamazoo

In my opinion the major problem presented by the proliferation of malpractice litigations is the increase, drastically, of the cost of medical care. "Defensive Medicine" is the cause of cost increase and is the result of litigation.

Constitutional guarantee of "Trial by Peers" is a mockery in that the jury is composed of "Peers" of the plaintiff—not the defendant.

The contingent fee method of payment does allow a plaintiff, without resources, the services of attorneys. It also is an incentive to allow the jury of "Peers" to be influenced by dramatics rather than by factual data.

The increasing cost of professional liability insurance is of small concern to most physicians. The inability of physicians to secure this type of insurance is a matter of major concern to the entire community as this depletes the number of physicians available to the public.

Suggested remedies:

1. A system of "no-fault" insurance which would allow insurance companies to compensate plaintiffs, on a fixed amount basis, without necessity to attach fault should be considered by insurance companies, physicians and attorneys.

2. A plan should be studied to award damages by a board of knowledgeable individuals, similar and very parallel to the Workmen's Compensation Program.

3. Each case headed toward litigation could be examined by a committee composed of Doctors, Plaintiff Attorneys, and Defense Attorneys perhaps chaired by a Judge. The recommendations of this committee would be a large factor to be considered if any further action be contemplated.

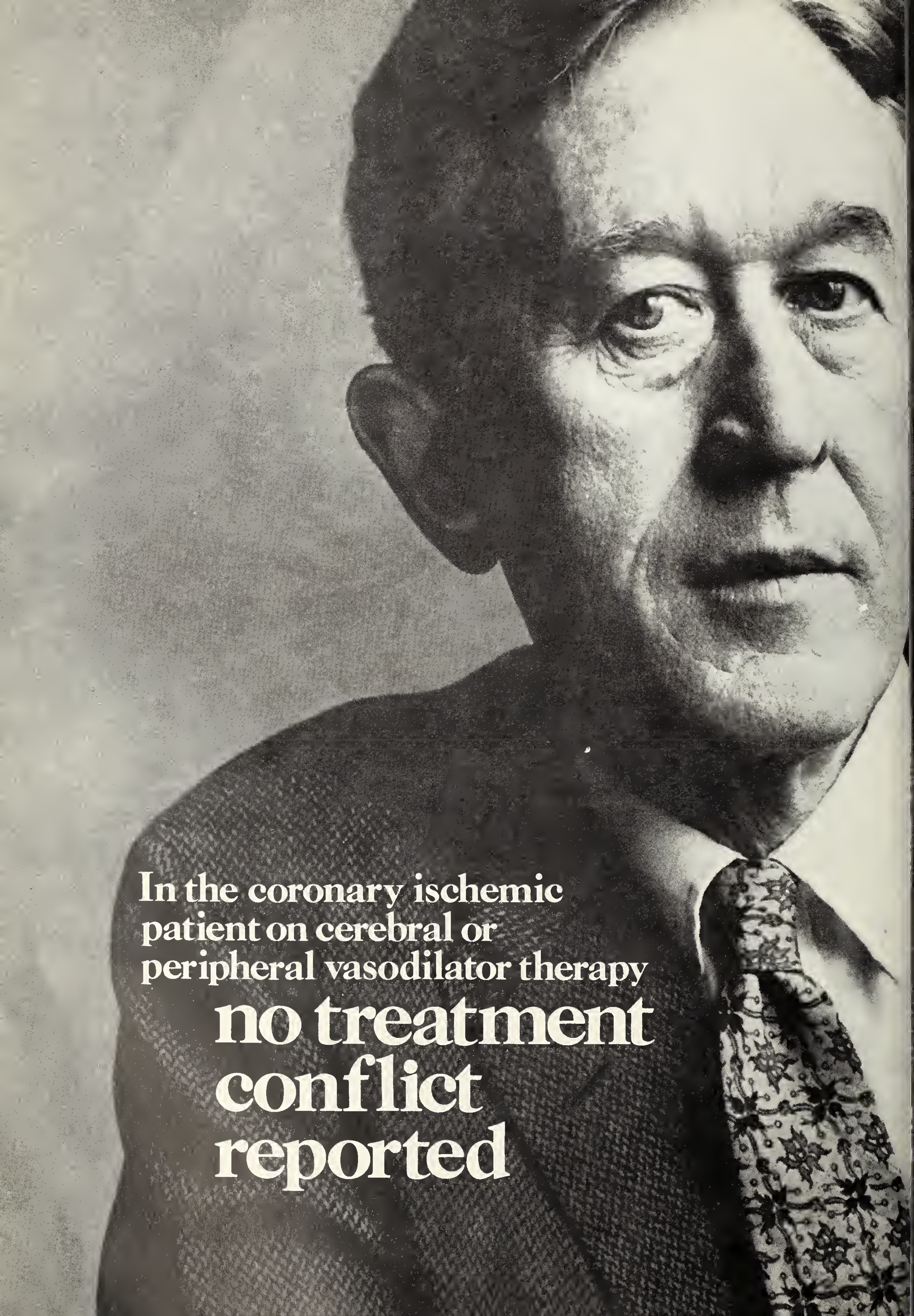
4. Some method of jury selection which would fairly represent defendant as well as plaintiff should be instituted.

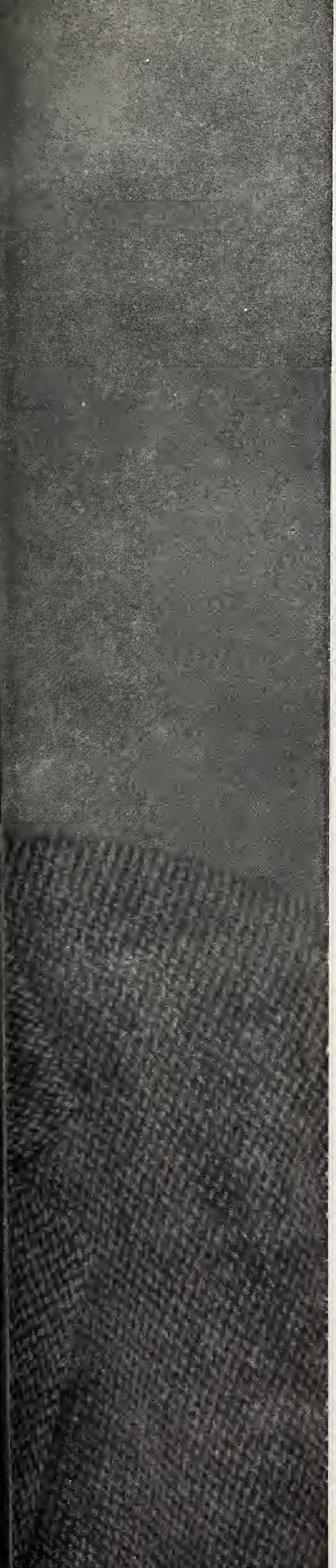
Agreements between Physicians, Attorneys and Insurance Companies embodying the above principles would go a long way toward alleviating a deteriorating situation which is hindering the distribution of quality medical care.

ACEP has new office

The American College of Emergency Physicians, which formerly had offices at MSMS headquarters, has moved to new quarters at 241 E. Saginaw St., Suite 503, East Lansing 48823. The rapidly-expanding new college has a suite of seven rooms at its new address and has hired more staff members to coordinate the activities of its 1,750 members.

Chairman of the board is John G. Wiegenstein, MD, Lansing, while Arthur Auer serves as executive secretary. Vincent J. Gebes is new assistant executive secretary and was formerly with the Mid-Michigan chapter of the American Red Cross as assistant executive director.


In the coronary ischemic patient on cerebral or peripheral vasodilator therapy
no treatment conflict reported



VASODĪLAN®

(ISOXSUPRINE HCl)

the compatible vasodilator

- may be used in your patients with coronary insufficiency.
- conflicts have not been reported with diuretics, corticosteroids, antihypertensives or miotics.
- complications in the treatment of diabetes, hypertension, peptic ulcer, glaucoma or liver disease have not been reported.

In fact, there are no known contraindications in recommended oral doses other than it should not be given in the presence of frank arterial bleeding or immediately postpartum.

Although not all clinicians agree on the value of vasodilators in vascular disease, several investigators[1-4] *have reported favorably on the effects of isoxsuprine. Effects have been demonstrated both by objective measurement*[2,4] *and observation of clinical improvement.*[1,3] **Indications:** Cerebrovascular insufficiency, arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). **Composition:** VASODĪLAN tablets, isoxsuprine HCl 10 mg. and 20 mg. **Dosage:** Oral—10 to 20 mg. t.i.d. or q.i.d. **Contraindications and Cautions:** There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of arterial bleeding. **Side Effects:** Occasional palpitation and dizziness can usually be controlled by dosage reduction. Complete details available in product brochure from Mead Johnson Laboratories. **References:** (1) Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960. (2) Horton, G. E., and Johnson, P. C., Jr.: Angiology *15*:70-74 (Feb.) 1964. (3) Dhrymiotis, A. D., and Whittier, J. R.: Curr. Ther. Res: *4*:124-128 (April) 1962. (4) Whittier, J. R.: Angiology *15*:82-87 (Feb.) 1964.

MeadJohnson
LABORATORIES

© 1971 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U.S.A. 182971

A Viewpoint on Pollution

C. E. Rupe, MD
Detroit

This is the dawning of the age of ecology, as well as of Aquarius. We are bombarded with information from many sources about all sorts of pollutants, many of which post immediate threats. Included in this issue of the *Voice* are some practical things that each of us can do to protect ourselves, others and those hopefully to come after us, if we are successful in preserving this good earth.

We can hope that this wave of enthusiasm will be converted into continuing action, rather than the agonizing complacency of a "let George do it" attitude. The warning flags are up, and it has been said that a special place in hell is reserved for the person who sees a problem and fails to take a stand on it.

In some areas we have become slightly hysterical in our concern about pollution. For instance, in the recent mercury situation—while recognizing the problem and supporting efforts to relieve and prevent it—we should also take a hard look at the data. It was recently reported that human tissues submitted to two laboratories gave such conflicting results as to be almost meaningless. The tissues from a six month old child, for example, were said to contain mercury levels higher than the tissues from adults. At this point, I believe, it is fair to say that we have only recognized the problem and must take steps to prevent perpetuation of the problem, but I doubt that eating the occasional fish from Lake St. Clair waters has been proved to be harmful. Indeed, for many years mercury in amounts equivalent to eating a bushel of fish has been used in the treatment of congestive heart failure.

Another pitfall in the current concerns regarding ecology, is the failure to realize that some of the efforts to return to an unpolluted atmosphere, for example, may have important and occasionally more damaging effects than the pollutant being removed. There has been a suggestion that some additives to replace lead have not been adequately studied to assure that they are preferable to lead. A professor of engineering at Dartmouth has calculated the effect of replacing all the automobiles and buses in New York City with electric cars. If the same number of people were to be moved the same distances by electricity, the atmosphere would, of course, contain less carbon monoxide, sulphur compounds and lead—a desirable effect. However, if this electrical power was generated by conventional means—i.e., the burning of fossil fuels—New York City would be wiped out by the increased pollutants, especially sulphur dioxide in the air, and the fact that the heat of automobile engines would not be present to insure an updraft of air to prevent the inversion of these lethal gases on the city. This is obviously an overdramatization of the problem, but does illustrate the fact that we must look at the new natural balances in our industrial society, rather than automatically considering that removal of any and all pollutants is automatically to be desired—the sooner the better—and often without proper study of the effects of the resulting new balance.

At this stage in the history of our concerns regarding ecology, we can see "specialists" appearing. There are those who drive down the road in a car twice too big, smoking at the exhaust, who are carefully stuffing their litter bags and using phosphate free detergents at home. There are those who at their work use the plastic cups and plastic stirrers and individually wrapped portions of cream, sugar, mustard and catsup, who then spend their weekends volunteering to pick up all the beer cans on Metropolitan Beach, or muck out a mile of the Rouge River. There are those who testify against the hunter (who may be an important element in ecologic balance for some species), but who elect congressmen that support the building of air strips across the disappearing marshes of Florida. There are those who fight environmental pollution tooth and nail while actively and deleteriously polluting their internal environment with cigarettes and alcohol.

If we individually and as a society recognize the threats to our environment and agree to work to-

(Continued on Page 731)

Reprinted with the permission of the author and the Saint John Hospital "Voice."

Doctor Rupe is Chief, Department of Medicine, Saint John Hospital

Michigan Mediscene

Sept. 16-18—Michigan regional meeting of the American College of Physicians, in conjunction with the Michigan Society of Internal Medicine, Sheraton-Cadillac Hotel, Detroit, contact: Muir Clapper, MD, ACP Governor for Michigan, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Sept. 23-24—American Heart Association, North Central Region, first "Comprehensive Conference on Stroke," Cobo Hall, Detroit

Sept. 25-26—Fall educational seminar and board meeting, Michigan State Medical Assistants Society, Holiday Inn, St. Joseph, contact: Claire Van Dam, 1850 Colfax at Lomar, Bentor Harbor, 49022

Oct. 1—Michigan Hospital Association House of Delegates meeting, Park Place Motor Inn, Traverse City, contact: H. Allan Barth, executive director, MHA, 2213 E. Grand River Ave., Lansing, 48912

Oct. 3 and 6—MSMS Council, Pantlind Hotel, Grand Rapids, contact: Warren F. Tryloff, MSMS director, MSMS headquarters.

Oct. 3-7—1971 MSMS Annual House of Delegates meeting and Scientific Sessions, Civic Auditorium, Grand Rapids

Oct. 4-6—1971 Annual Convention of the Woman's Auxiliary to MSMS, Pantlind Hotel, Grand Rapids

Oct. 11—Departure day for 14-day MSMS Orient Adventure; contact: Miss Helen Schulte, MSMS Headquarters

Oct. 20-21—Michigan TB and Respiratory Disease Education Meeting, Kellogg Center, East Lansing, contact: Les Harcus, Public Relations, Michigan TB and Respiratory Disease Association, 403 Seymour, Lansing

Oct. 25-29—Michigan Nurses Association Convention, Pantlind Hotel, Grand Rapids, contact: William E. Ludwig, public relations director, NMA, 120 Spartan Ave., East Lansing, 48823

Nov. 3 and 4—The First Michigan Allied Health Postgraduate Course in Diabetes will be held at Sinai Hospital in Detroit; contact Miss Barbara Lofquist, regional director, 6131 West Outer Drive, Detroit, 48235. Dinner meeting, Northland Inn, Nov. 3, afternoon workshop session, Nov. 4

Nov. 10—MSMS Council, MSMS headquarters, East Lansing, noon to 5 p.m., contact: Warren F. Tryloff, MSMS director, MSMS Headquarters

Nov. 28-Dec. 10—Many Michigan physicians will be attending the AMA Clinical Convention in New Orleans

Dec. 8—MSMS Council, MSMS Headquarters, East Lansing, 9:30 a.m., contact: Warren F. Tryloff, MSMS director

Dec. 8-11—Annual Thyroid Workshop, sponsored by Thyroid Service of Wayne State University School of Medicine, Wayne County Medical Society Auditorium, Detroit; contact: Ali Abbasi, MD, Publicity Committee, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Jan. 29, 1972—Lansing Community Hospital Education Committee, all-day session on Ambulatory Patient Problems

Jan. 29-30—Educational seminar and board meeting, Michigan State Medical Assistants Society, Holiday Inn, Battle Creek, contact: Patricia Voke, 196 S. Woodrow Ave., Battle Creek, 49015

March 26—Board Meeting, Michigan State Medical Assistants Society, noon, MSMS Headquarters

April 27-30—Annual Convention, Michigan State Medical Assistants Society, Holiday Inn, Crosstown Parkway, Kalamazoo, contact: Mrs. Betty Boers, 1116 Sheridan, Kalamazoo 49001

Mott Center To Serve 'Multicap' Children

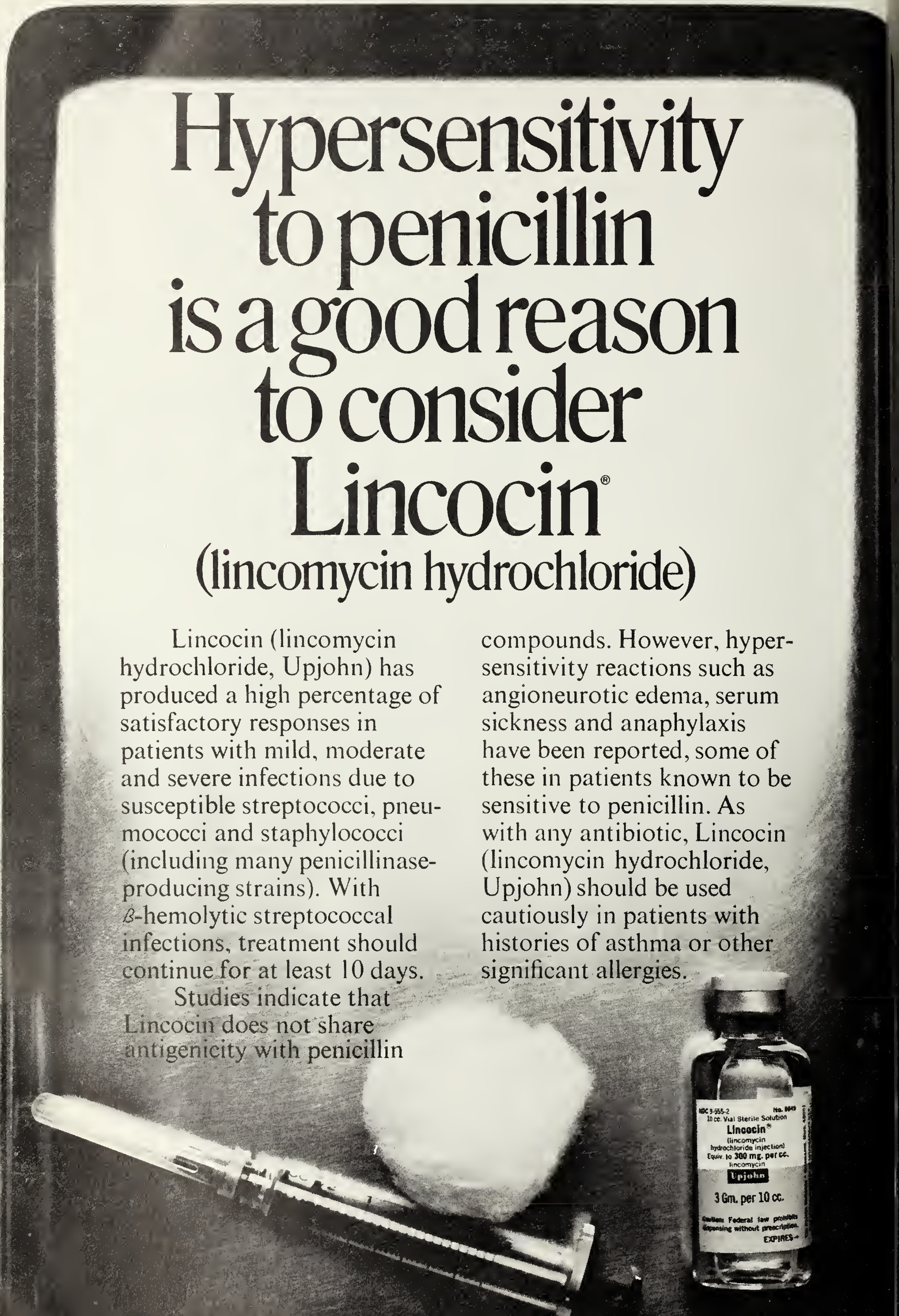
At the request of the Special Education Division of the Michigan Department of Education, the Mott Children's Health Center, in cooperation with the Genesee Intermediate School District, will this fall offer diagnostic services which will serve children with multiple handicaps throughout the state. Recent studies have shown the need for the specialized diagnostic services for the multiply handicapped which the center is able to provide.

Support from the Mott Foundation, federal funds, and the state will cover the operating cost of nearly $200,000 for the Center's first year. Estimates place the number of children to be diagnosed each year at 100. Priority will be given to younger children and those in federal Title VI programs. The Center hopes the child's teacher will be present during the diagnosis, thereby enabling participation in the diagnosis and the determination of the prescription.

POLLUTION/Continued

gether in doing all we can about it, we are immediately faced with the question of priorities. Our behavior in this respect would be extremely difficult for a visitor from outer space to understand. He would see on the one hand banners, programs, newspapers and buttons extolling ecological concern, while in another part of the world we kill human beings, and defoliate forests. He would see a great industrial complex on the shores of a dying lake, producing more and more automobiles near a large city which has no public transportation system. He would see subsidies paid for not growing food, while considerable segments of the population went to bed hungry. The list goes on.

Ecology deserves high priority, but a single candle burns cursing the darkness—each of us can help—let's do it!



Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With ß-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.

NDC 9-555-2
10 cc. Vial Sterile Solution
Lincocin®
(lincomycin hydrochloride injection)
Equiv. to 300 mg. per cc. lincomycin
Upjohn
3 Gm. per 10 cc.
Federal law prohibits dispensing without prescription.
EXPIRES→

So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn)

NDC 9-555-2
No. 8049
10 cc. Vial Sterile Solution
Lincocin®
(lincomycin
hydrochloride injection)
Equiv. to 300 mg. per cc.
lincomycin
Upjohn
3 Gm. per 10 cc.
Caution: Federal law prohibits
dispensing without prescription.
EXPIRES

© 1971 The Upjohn Company

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

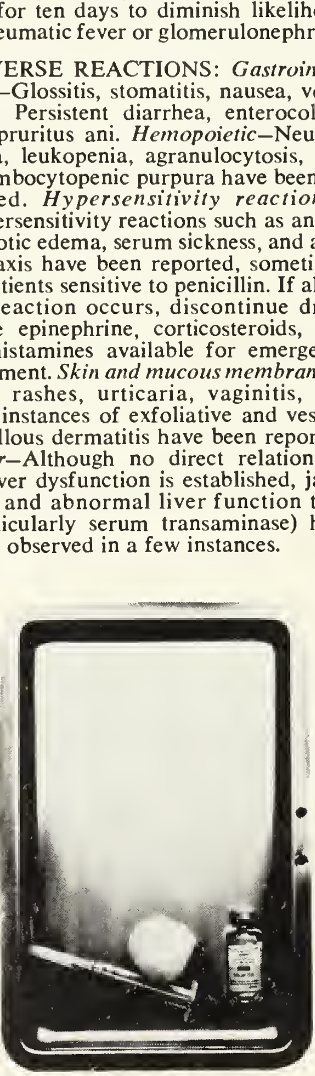
Syrup, 250 mg. per 5 ml.—60 ml. and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

JA71-1203 MED B-5-SR (KZL-6)

The Upjohn Company
Kalamazoo
Michigan 49001

Upjohn



DRUG THERAPY PROBLEMS

By Persis Mehta, PhD
Ann Arbor

Q. May procaine penicillin be given to the newborn? (M.B., Southfield)

A. Procaine penicillin has been known to cause sterile abscesses on occasion in infants under three months of age and is hence contraindicated in that age group. Besides, penicillin G given intramuscularly is well absorbed and produces high and prolonged levels in neonates due to diminished renal function at that stage of their development and therefore obviates the use of a long-acting penicillin.

Q. What is the salt content of normal human serum albumin as compared to that of plasma? (P.M., Ann Arbor)

A. Normal human serum albumin is low in salt. The sodium ion content is only 60 mg. per 20 ml., whereas an equal volume of plasma contains 420 mg. The low salt content is of clinical significance in the treatment of hypoproteinemia, edema or nephrosis since the concentration of sodium in the extracellular fluid should be maintained at a minimum level in these conditions.

Q. Does organic mercury as found in certain food products cross the placenta? (G.K., Ann Arbor)

A. A recent report in the literature describes a a case of congenital mercury poisoning with methyl mercury ingested by a woman during the second trimester of pregnancy. Shortly after birth, the neonate exhibited neurological signs attributed to mercury toxicity while the mother remained symptomless. Mercury levels in the infant's urine were found to be abnormally high. Animal experiments have also shown that mercury crosses the placenta and is concentrated in the fetus, producing anatomical changes in the fetal brain.

Q. Has 5-fluorouracil been administered orally? (J.M., Ann Arbor)

A. Although an oral form of the drug is not commercially available, there have been studies in which the powder has been administered in capsule or tablet form or as a solution. Diarrhea and oral ulcerations were reported to be the most common toxic manifestations and usually occurred before the development of thrombocytopenia or leukopenia. The results produced with the drug in solution proved to be more consistent than those obtained with the solid dosage forms, possibly indicating better absorption of the liquid medication.

Doctor Mehta is associate project coordinator of the Michigan Regional Drug Information Center, University Hospital, Ann Arbor.

Taste!

Dicarbosil®
ANTACID

Your ulcer patients and others will love it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

ARCH LABORATORIES
319 South Fourth Street, St. Louis, Missouri 63102

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health

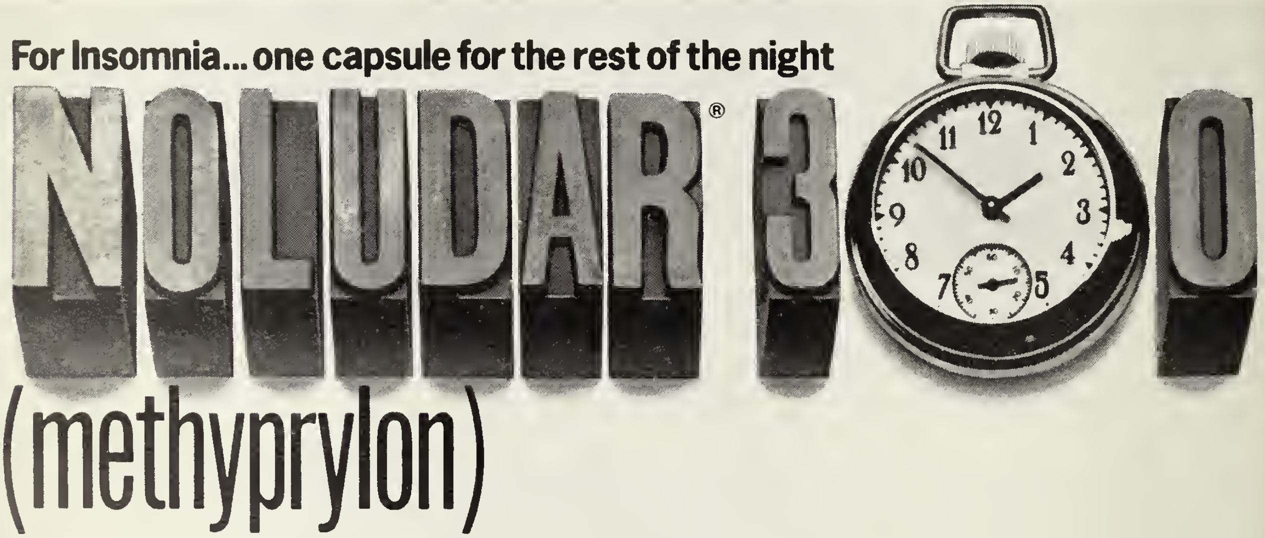
For the Five-Week Period Ending July 2, 1971

	1971 This 5-Week Period	1970 Same 5-Week Period	1971 Total To Above Date	1970 Total Same Date	Total Cases for 1970
Rubella	424	390	2,441	2,409	3,012
Congenital Rubella Syndrome	0	0	1	0	2
Measles	649	481	1,977	1,371	1,834
Whooping Cough	12	12	53	53	195
Diphtheria	—	—	—	—	—
Mumps	1,350	981	9,182	4,507	7,825
Scarlet Fever & Strep Sore Throat	822	953	7,360	7,506	11,863
Tetanus	0	0	0	4	8
Poliomyelitis (paralytic)	0	0	0	0	2
Hepatitis	407	421	2,592	2,323	4,594
Salmonellosis (other than S. typhi)	58	70	316	297	665
Typhoid Fever (S. typhi)	0	1	2	6	14
Shigellosis	22	11	94	95	225
Aseptic Meningitis	4	9	54	29	296
Encephalitis	13	11	66	44	155
Meningococcic Meningitis	6	13	47	45	69
H. Influenza Meningitis	13	6	47	33	61
Tuberculosis	171	167	1,002	1,033	2,006
Syphilis	467	367	2,137	1,903	3,900
Gonorrhea	2,116	1,834	9,992	9,848	20,676

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

For Insomnia...one capsule for the rest of the night

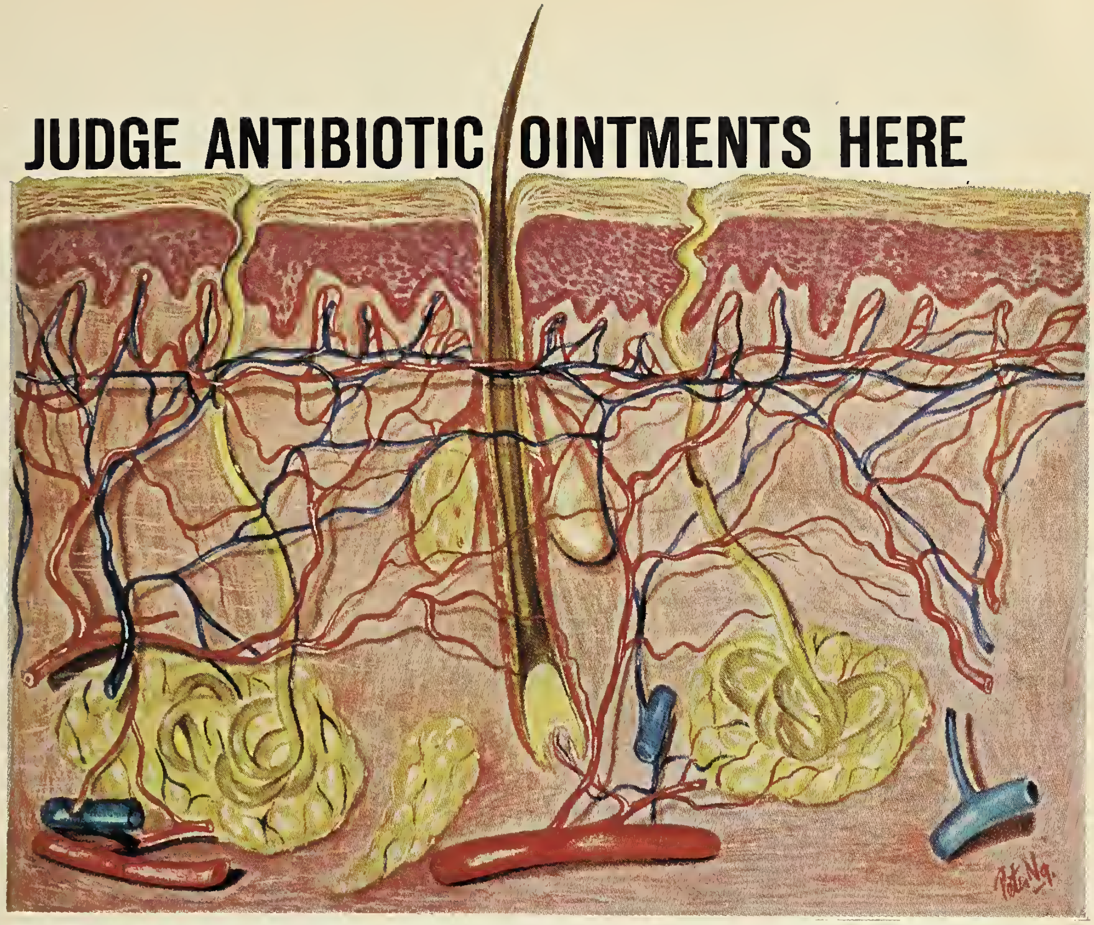


Before prescribing, please consult complete product information, a summary of which follows:
INDICATION: Relief of insomnia of varied etiology.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.
Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

ROCHE
ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

JUDGE ANTIBIOTIC OINTMENTS HERE



Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®

brand

POLYMYXIN B-BACITRACIN-NEOMYCIN
OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

gastritis

when
G-I symptoms
demand
a potent
synthetic
anticholinergic

move up to
"the Robinul
response"

In treating hypersecretion and hypermotility associated with gastritis are you disappointed in the results you've been getting with some of the synthetics?
Then *move up* to a potent anticholinergic—Robinul® Forte (2 mg. glycopyrrolate).
It provides prompt, pronounced, prolonged suppression of gastric hypersecretion, making it a highly effective agent in gastritis and other upper G-I conditions associated with hypersecretion and hypermotility.
Because Robinul Forte exerts a profound antispasmodic action, it is also useful in the treatment of lower G-I disorders, such as functional bowel distress and spastic and irritable colon. If the patient has a "one tract mind" concerning his condition, you can help control the anxiety and tenseness by prescribing Robinul®-PH Forte (2 mg. glycopyrrolate with 16.2 mg. phenobarbital —warning: may be habit forming).

Robinul® 2mg. Forte (glycopyrrolate)

DICATIONS Robinul Forte (glycopyrrolate, 2 mg.) and Robinul-PH Forte are double-strength dosage forms of glycopyrrolate. They are primarily
cated for patients who are less responsive to anticholinergic therapy and for control of the more prominent symptomatology associated with
e episodes of gastrointestinal disorders. Emphasis should be on total management, with due consideration of the various therapeutic modalities
able, including diet, antacids, anticholinergic agents, sedatives, and attention to emotional problems. Accordingly, glycopyrrolate is recom-
ded in the management of gastrointestinal disorders amenable to anticholinergic therapy, such as: (1) duodenal ulcer, duodenitis, pylorospasm;
astric ulcer, gastritis, esophageal hiatal hernia, hyperchlorhydria, pyrosis, aerophagia, gastroenteritis; (3) esophagitis; (4) cholecystitis, chronic
reatitis; (5) spastic and irritable colon, ulcerative colitis, functional bowel distress, diverticulitis, acute enteritis, diarrhea; and (6) splenic flexure
rome, neurogenic gastrointestinal disturbances. When these conditions are associated with psychic overlay, the formulation with phenobarbital
be indicated. ■ CONTRAINDICATIONS Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric reten-
prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH
(glycopyrrolate with phenobarbital), sensitivity to phenobarbital. ■ PRECAUTIONS Administer with caution in the presence of incipient
coma. ■ SIDE EFFECTS The most frequent side effect noted during clinical trials was dry mouth. Thirty-three (3.3%) of 1,009 patients receiving
32 mg. of glycopyrrolate a day complained of dry mouth of moderate to severe degree, but only 11 discontinued treatment because of this.
red vision, constipation, and urinary hesitancy have been reported infrequently. Other side effects associated with the use of anticholinergic
s include: tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsi-
, and rash. ■ DOSAGE The average and maximum recommended dose of Robinul Forte (glycopyrrolate, 2 mg.) or Robinul-PH Forte is one
t three times daily (in the morning, early afternoon, and at bedtime). To obtain optimum results, dosage should be adjusted to the individual
nt's response. After the more severe symptoms associated with acute conditions have subsided, the dose may be reduced to the minimum
ired to maintain symptomatic relief. ■ SUPPLY Robinul Forte (glycopyrrolate, 2 mg.) is available as scored, compressed pink tablets engraved
/2 in bottles of 100 and 500. ■ Robinul-PH Forte (glycopyrrolate, 2 mg., with phenobarbital, 16.2 mg.) is available as scored, compressed blue
ts engraved AHR/2 in bottles of 100 and 500.

A. H. Robins Company, Richmond, Va. A·H·ROBINS

The get-up-and-go summer cold and allergy pill.

Novahistine LP can help your patients get out and enjoy themselves in spite of allergic rhinitis, hay fever or summer colds. And even when nasal congestion is caused by repeated allergic episodes, Novahistine LP can usually give prompt and long-lasting relief. These continuous-release tablets contain a vasoconstrictor-antihistamine formulation that goes to work rapidly and lasts for hours. And convenient, twice-a-day dosage lets most patients enjoy relief all day and all night. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

Novahistine® LP decongestant

DOW THE DOW CHEMICAL COMPANY, Rx Pharmaceuticals, Indianapolis

(Each tablet contains 25 mg. of phenylephrine hydrochloride and 4 mg. of chlorpheniramine maleate.)

Medical care programs

By Herbert Mehler, Staff Assistant
MSMS Committee on
Governmental-Medical Care Programs

Legislative Activity

After considerable debate, the House passed H.R. 1, on June 22, 1971, the Social Security Amendments of 1971. This bill now goes to the Senate where hearings could start sometime in July and continue after the planned August recess.

Included in the bill are provisions increasing social security cash benefits, amending the Medicare, Medicaid, and Maternal and Child Health programs and establishing the Administration's Family Assistance Plan.

The bill contains many changes in the Medicare, Medicaid programs. Under some of the major provisions, the House-passed bill:

....Requires the Health Insurance Benefits Advisory Council to conduct a study of the methods of physicians' reimbursement under Medicare to evaluate their effects on: (1) physicians' fees generally, (2) the extent of assignments accepted by physicians, and (3) the share of total physician fee costs which the beneficiary must assume. A report is required to be submitted to Congress by July 1, 1972, including a presentation of alternatives to the present methods of reimbursement and the Council's recommendations as to the preferred method.

....Extends Medicare benefits to the disabled after they have been entitled to disability benefits under the Social Security Act or under the Railroad Retirement Act for at least two years.

....Prevents the Part B premium from increasing (above $5.60) by a greater percentage than any percentage increase in cash benefits.

....Increases the Part B deductible from $50 to $60.

....Requires a Part A daily coinsurance amount of one-eighth the hospital deductible (presently $60) for the 31st through the 60th days of hospitalization, and one-fourth the hospital deductible for the 61st through the 90th day.

....Increases the lifetime reserve of hospital days from 60 to 120.

....Provides for a 25 per cent increase in the federal matching percentage to a state (limited to a maximum of 95 per cent matching) under Medicaid, when services are provided through a contract with an HMO, a comprehensive health care organization or similar facility . . . Provides for a 33⅓ per cent decrease in matching for institutional care (except when provided through an HMO) after stated periods of time for care in general or tuberculosis hospitals, skilled nursing homes, and mental hospitals.

....Directs the Secretary of HEW to carry out experiments and demonstration projects to evaluate various alternative methods of making prospective payments, to determine what other changes, including negotiated rates, would increase efficiency and economy, and to determine whether peer review, utilization review and medical service mechanisms established area-wide or community-wide would be beneficial and effective.

....Sets a limitation on prevailing charge levels for physicians' services at the 75th percentile of customary charges in the locality, with allowable increases tied to certain economic indexes.

....Provides for prospective, per capita payments under Medicare to HMO's for enrollees entitled to Part A and Part B services, and for Part B services only when the individual is not entitled to Part A benefits.

....Authorizes Secretary of HEW to terminate payments to providers of services in cases of program abuse.

....Pays for services of teaching physicians on basis of reasonable cost rather than reasonable charge unless certain circumstances exist.

....Creates a two-year study of the feasibility of covering chiropractic services under Medicare.

....Provides penalty provisions of up to $10,000 fine or one year in prison, or both, for certain acts including false representations of fact relating to rights to benefits and payments under Medicare and Medicaid, and also for rebates of fees and referrals.

....Requires the Secretary to develop proficiency tests to permit certain individuals to furnish reimbursable Medicare services without meeting educational or licensing requirements.

AMA Bills Introduced in Congress

Here is a list of some important, major legislative proposals:

H.R. 7797

A bill to amend the antitrust laws regarding blood banks.

This bill will provide that the refusal of nonprofit blood banks and of hospitals and physicians to obtain blood and blood plasma from other blood banks shall not be deemed to be acts in restraint of trade.

H.R. 7914

A bill to provide direct payments under Medicaid.

This bill would authorize direct payments for physician's and dentist's services, at the option of the state, to individuals, regardless of whether they are receiving cash benefits or not.

H.R. 8243

A bill to establish a U.S. Department of Health.

The Department would be headed by the Secretary and Under Secretary of Health, who would be doctors, appointed by the President with the consent of the Senate. The Department would administer all programs relating to health now under HEW and other Federal agencies, to end the unnecessary overlapping and duplication of services and health resources.

S. 1898
H.R. 8684

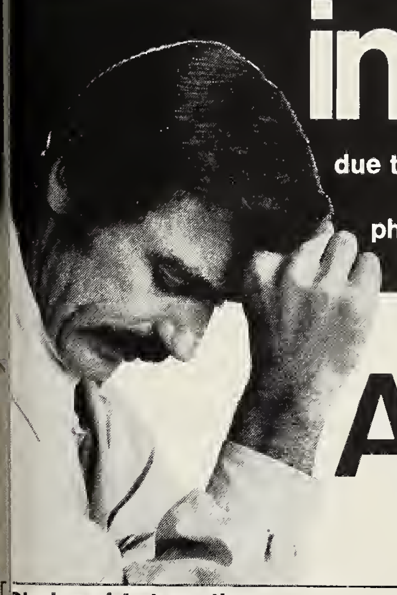
A bill to provide for the creation of Peer Review Organizations.

The bill would authorize agreements between state medical societies, or organizations designated by them, and the Secretary of HEW to establish programs of peer review. Five-man state Peer Review Organization Commissions and three-man local review panels would be established to review matters pertaining to reasonableness of charges, the need for, and quality of, services rendered by the provider of medical or other health services under Medicare, Medicaid, or other health care programs. Upon a determination by the local panel and the Commission of substantial violations, the Commission would have authority to terminate payments for services performed by the provider under Medicare, Medicaid, and other federal health care programs.

H.R. 8692

A bill to require certain information on prescription drug labels.

Labels would be required to bear the established or trade name of the drug and the quantity or strength of the drug dispensed unless the practitioner indicates the drug should not be so labeled.



The treatment of

impotence

due to androgenic deficiency in the American male.
The concept of chemotherapy plus the physician's psychological support is confirmed as effective therapy.

NEW CLINICAL STUDY

The Treatment of Impotence
with Methyltestosterone Thyroid
(100 patients — Double Blind Study)
T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the
American Fertility Society

Android®
(thyroid-androgen) tablets

Double-Blind Study and Type of Patient: 100 patients suffering from impotence. Of the patients receiving the active medication (Android) a favourable response was seen in 78%. This compares with 40% on placebo. Although psychotherapy is indicated in patients suffering from functional impotence the concomitant role of chemotherapy (Android) cannot be disputed.

Choice of 4 strengths:

Android

ach yellow tablet contains:
ethyl Testosterone ..2.5 mg.
hyroid Ext. (1/6 gr.) ..10 mg.
lutamic Acid ....50 mg.
hiamine HCL ....10 mg.
ose: 1 tablet 3 times daily.
vailable:
ottles of 100, 500, 1000.

REFER TO PDR

Android-HP
HIGH POTENCY

Each red tablet contains:
Methyl Testosterone ..5.0 mg.
Thyroid Ext. (½ gr.) ...30 mg.
Glutamic Acid ....50 mg.
Thiamine HCL ....10 mg.
Dose: 1 tablet 3 times daily.
Available:
Bottles of 100, 500, 1000.

Android-X
EXTRA HIGH POTENCY

Each orange tablet contains:
Methyl Testosterone .12.5 mg.
Thyroid Ext. (1 gr.) ....64 mg.
Glutamic Acid ....50 mg.
Thiamine HCL ....10 mg.
Dose: 1 or 2 tablets daily.
Available:
Bottles of 60, 500.

Android-Plus
WITH HIGH POTENCY
B-COMPLEX AND VITAMIN C

Each white tablet contains:
Methyl Testosterone ..2.5 mg.
Thyroid Ext. (¼ gr.) ...15 mg.
Ascorbic Acid (Vit. C) .250 mg.
Thiamine HCL ....25 mg.
Glutamic Acid ....100 mg.
Pyridoxine HCL ....5 mg.
Niacinamide ....75 mg.
Calcium Pantothenate .10 mg.
Vitamin B-12 ....2.5 mcg.
Riboflavin ....5 mg.
Dose: 2 tablets daily.
Available: Bottles of 60, 500.

Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients; use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

te for literature and samples: BROWN THE BROWN PHARMACEUTICAL CO., INC. 2500 West 6th Street, Los Angeles, California 90057

Ancillary

Officers newly-elected by the board of trustees of the Michigan Heart Association include Pontiac cardiologist Donald C. Overy, MD, recently chosen president-elect of the association.

Gerald M. Breneman, MD, with the Division of Cardiovascular Disease, Ford Hospital, Detroit, was elevated as president of the organization. Doctor Breneman succeeds Harold E. DePree, MD, Kalamazoo.

Detroit Doctor Leads Drive for Black Museum

Solicitation of funds for a new Afro-American Museum in Detroit is underway in a campaign coordinated by Charles H. Wright, MD, Detroit, chairman of the museum board of directors. A target date for construction of the building is 1974. While no site has been set for the museum, plans call for it to include an auditorium, dining room, and art school. Doctor Wright announced that $13,000 has been made to the museum by the Afro-American Foundation of Detroit, the grant to be used for use as salary for a full-time museum director.

Wolz to Lead MHA

The Michigan Hospital Association has elected Kenneth E. Wolz, administrator of Saginaw General Hospital, as its president for 1971-1972, during its recent session at Mackinac Island

Frank A. Drazkowski, Jr., executive director of Grand View Hospital in Ironwood, was named president-elect.

Julien Priver, MD, executive vice president of Sinai Hospital in Detroit, was elected a delegate to the AHA.

Title as 'Ship's Physician' Helps Cookseys in Vietnam

By means of a quickly devised ruse through which he agreed to becoming official "ship's physician," Warren B. Cooksey, MD, Troy, and his wife, Sue, were allowed to leave their freighter in Saigon, South Vietnam. Their destination was a visit with an old friend, Lawrence Pratt, MD, a Detroiter in Vietnam working for the U.S. Government. Upon arriving at the port, the Cookseys learned that only crew members—no Americans—were allowed to leave the ship. Thus through the cooperation of the captain and his new title, "ship's physician," Doctor Cooksey became a crew member.

Conference on Stroke Treatment Set for Detroit, Sept. 23-24

The American Heart Association's North Central Region will hold its first "Comprehensive Conference on Stroke" Sept. 23 and 24 at Cobo Hall in Detroit. "The conference has been designed to convince all medical professionals that the stroke patient can be helped and to present them with necessary techniques to employ in this area of health care," sponsors report.

Cosponsored by the AHA Council on Cerebrovascular Disease and the Michigan Heart Association, the conference will be open to doctors, nurses, therapists and other paramedical personnel from Illinois, Indiana, Kentucky, Michigan, Ohio and Wisconsin. Some of the sessions will be reserved for attendance by physicians only.

The first day of the meeting will be concerned primarily with the acute illness, including "Differential Diagnosis, Prevention, Intracranial Hemorrhage and Treatment and Management of Transient Ischemic Attacks" The second day's session is entitled "Rehabilitation" and features four morning presentations and seven afternoon workshops.

State Radiological Elects

Raymond A. Gagliardi, MD, Pontiac, has been chosen president-elect of the Michigan Radiological Society, now the College of Radiology. Current president is Kenneth L. Krabbenhoft, MD, professor and chairman of Radiology at Wayne State Medical School. Outgoing president is Maurice Tatelman, MD, Detroit.

Newly-elected as secretary is George A. Kling, MD, Detroit, who succeeds David P. Corbett, MD, Harper Woods.

State Official Explains Comprehensive Health Education Planning

Correcting a popular misconception about Public Act 226, the Critical Health Problems Legislation, E. J. McClendon, EdD, special assistant to State School Superintendent John Porter, noted that the legislation allows, but does not require, school districts to develop K-12 health education programs. His observations were made at the recent conference on Comprehensive School Health Education, sponsored by Michigan State Medical Society, Michigan Dental Association and Michigan Health Council. Doctor McClendon gave a progress report on efforts by the State Department of Education to implement PA 226 by employing special staff, by planning curriculum guides, etc. The majority of the conference participants concluded that current health education programs lack a cohesive structure and center upon only a few particularly dramatic behavior problems of youth. Genevieve Howen, MD, Chief of the Child Health Division of the Michigan Department of Public Health, gave a statistical report on the health problems of Michigan youth. Recent studies indicate that often Michigan young people are not identified as health problems or that their difficulties are overlooked. Statistics revealed that accidents are the leading cause of death in children, she said, with cancer, homicide and suicide also ranked among the top killers of youth. Doctor Howen also noted that the death rate has increased by 38 percent for youths 15 to 19 between 1960 and 1969. She further reported a startling rise in illegitimate births, particularly among very young teenaged girls.

Norman Weinheimer, EdD, executive secretary of the Michigan School Board Association, remarked that curriculum content and materials need to be more specific, largely because the term 'health education' itself is so ambiguously interpreted. More than 40 professional and organizational health personnel attended the invitational conference. Thomas Berglund, MD, Kalamazoo chairman, MSMS Committee on Public Relations, gave some opening comments to help set the stage.

U-M Receives Papers of Francis, Novy

Mrs. Thomas J. Francis, assisted by Fred M. Davenport, MD, has presented to the University of Michigan's Historical Collections 43 feet of manuscript materials relating to Doctor Francis' outstanding career. Doctor Francis was chairman of the Department of Epidemiology in the School of Public Health and a professor of Epidemiology in the University Medical School. Included in the collection is material pertaining to his work as director of the field testing program for the Salk polio vaccine and correspondence concerning additional scientific efforts.

The Historical Collections in 1970 also received materials of Frederick G. Novy, MD. While at the University of Michigan he was a professor of bacteriology, Director of the Hygienic Laboratory, and Dean of the University Medical School. The seven feet of papers which constitute his collection include notebooks concerning his work with the Plague Commission and the Pasteur Institute at the University.

Construction Begins On New Cancer Center

Construction of the $4.5 million Meyer L. Prentis Cancer Center was begun in early July in Detroit. The five-story building will house the research and administrative branch of the Michigan Cancer Foundation (MCF). Initiation of the new institution was financed by a gift of $500,000 by the Meyer and Anna Prentis Family Foundation, with supporting donations from the United Foundation (UF), the Kresge Foundation, General Motors Corp., and the Anastasia R. Buhl Memorial Fund.

Meyer L. Prentis, one of the United Foundation's most active volunteers, died July 15, 1970 at the age of 84. The Michigan Cancer Foundation is the UF's only cancer control agency. The MCF serves Wayne, Oakland, Macomb and Monroe counties and is largely supported for its year-round functions by donations from the UF, private bequests and the services of thousands of volunteers.

Three Bay City MDs and one DO
have banded together to provide 24-hour emergency room care at the local Mercy Hospital. The three MDs are Orlen J. Johnson, MD; G. T. Buechle, MD, and Allen B. Moore, MD. Their corporation replaces the hospital's former "on-call" emergency room system.

Melvin Thorner, MD,
has been named to the staff at Traverse City State Hospital, where he will work in the research and training department. He served the past five years as director of psychotropic drug research for Schering Corp., Bloomfield, N.J.

New Members

Ali A. Abbasi, MD, Detroit General Hospital, Detroit 48226

Sharif Baig, MD, 25750 W. Outer Drive, Lincoln Park 48146

Graeme C. Baker, MD, Detroit General Hospital, Detroit 48226

Erol Bastug, MD, W. Outer Drive Hospital, Lincoln Park 48146

Carlito V. Cruz, MD, 20867 Mack Ave., Grosse Pte. Woods 48236

Donald M. Ditmars, Jr., MD, Henry Ford Hosp., Detroit 48202

Adnan H. Eldadah, MD, 3500 N. Logan, Lansing 48906

Rolando M. Fajardo, MD, 429 Paw Paw, Coloma 49038

Hernan L. Guiang, MD, 1725 Peck St., Muskegon 49441

Michael A. Harris, MD, Ford Motor Company, Dearborn 48121

Wallace E. Johnson, MD, Henry Ford Hospital, Detroit 48202

Young Song Kim, MD, 3800 Woodward Ave., Detroit 48201

Philip LeBlanc, MD, Detroit General Hospital, Detroit, 48226

Carlos Max, MD, 18984 Livernois, Detroit 48221

Jordon Ohl, MD, Sinai Hospital, Detroit 48235

Robert T. Polack, MD (Reinstatement), 24435 Hoover, Warren 48089

Constantin Predeteanu, MD, 810 David Whitney Bldg., Detroit 48236

Seong Kyun Pyun, MD, St. Joseph Mercy Hosp., Detroit 48211

F. Q. Rasay-Farooki, MD, Detroit General Hosp., Detroit 48226

Ariston C. Sandoval, Jr., MD, Sinai Hospital, Detroit 48235

Evelio M. Santiago, MD, St. John Hospital, Detroit 48236

Douglas D. Strong, MD, 5050 Joy Rd., Detroit 48204

Oscar C. Tumacder, MD, 771 Fisher Bldg., Detroit 48202

Duane J. Bailey, MD, 238 W. Caroline St., Fenton 48430

Sabah K. George, MD, 721 W. Sixth Ave., Flint 48503

Vickers Hansen, MD, 310 Ninth St., Manistee 49660

Fredric A. Helmer, MD, 2765 Flushing Rd., #315, Flint 48504

(Continued on Page 754)

Pre-Sate® (chlorphentermine hydrochloride)

Caution: Federal law prohibits dispensing without prescription.

Indications

Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications

Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with dange of arrhythmias. The drug is also contraindicated during o within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings

When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activitie such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment Therefore, such patients should be cautioned accordingly Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence Drugs of this type have a potential for abuse Patients have been known to increase the intake of drugs o this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy The safety of Pre-Sate (chlorphentermin hydrochloride) in human pregnancy has not yet been clearl established. The use of anorectic agents by women who are o who may become pregnant, and especially those in the firs trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child Use of the drug during lactation is not recommended. Mammalia reproductive and teratogenic studies with high multiples of th human dose have been negative.

Usage In Children Not recommended for use in children unde 12 years of age.

Precautions

In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss Pre-Sate (chlorphentermine hydrochloride) should be used wit caution when obesity complicates the management of patient with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribin this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician shoul be alert to the individual who may be overly sensitive to thi drug. Psychologic disturbances have been reported in patient who concomitantly receive an anorectic agent and a restrictiv dietary regimen.

Adverse Reactions

Central Nervous System: When CNS side effects occur, the are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache euphoria, dysphoria, and tremor may also occur. Psychoti episodes, although rare, have been noted even at recommende doses. **Cardiovascular:** tachycardia, palpitation, elevation o blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes i libido, impotence. **Autonomic:** dryness of mouth, sweating mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and rarely, difficulty in initiating micturition. **Others:** Paresthesias sural spasms.

Dosage and Administration

The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use i children under 12 not recommended.

Overdosage

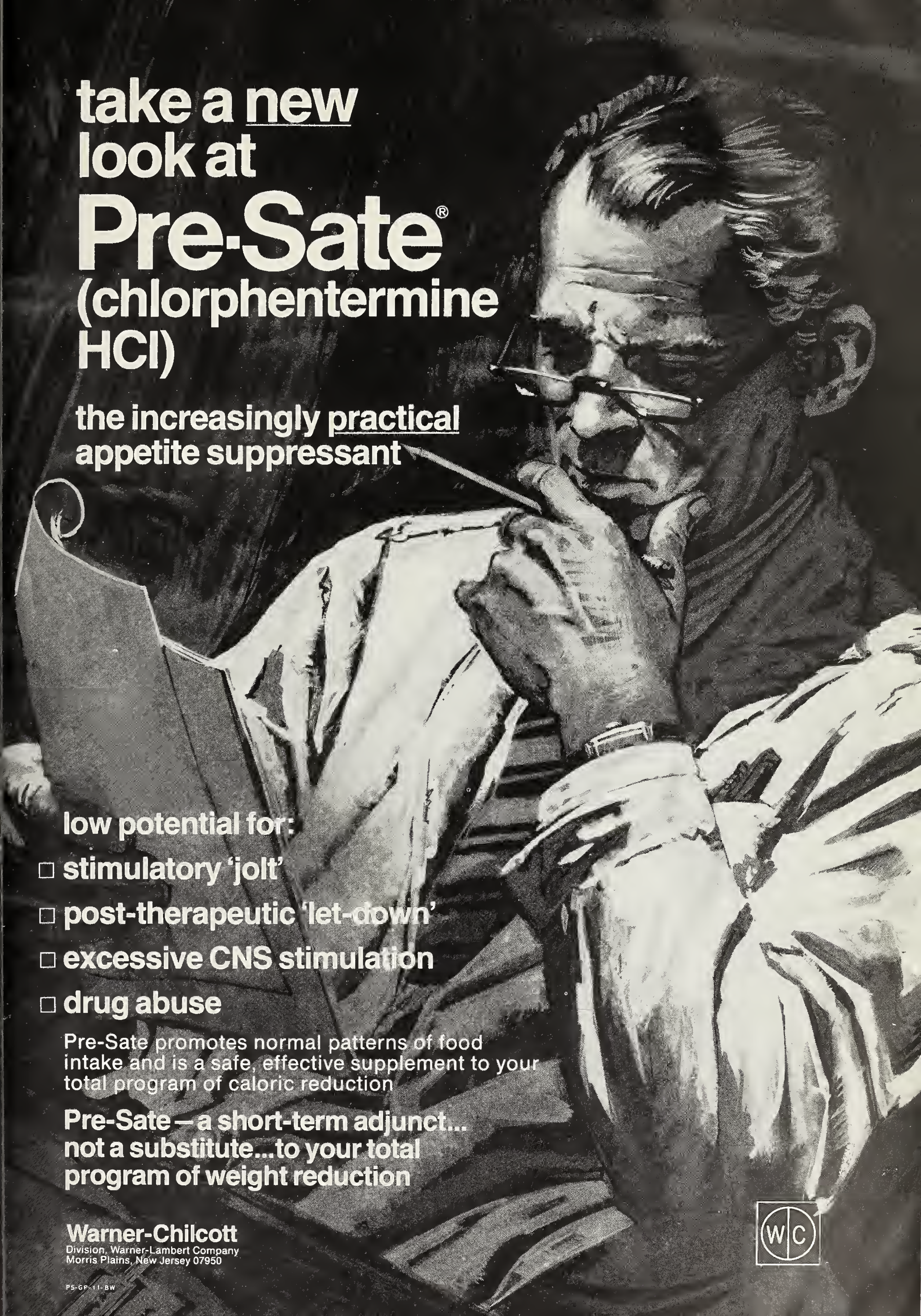
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue an depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotensio and circulatory collapse. Gastrointestinal symptoms includ nausea, vomiting, diarrhea, and abdominal cramps. Fata poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportiv and often includes sedation with a barbiturate. If hypertension i marked, the use of a nitrate or rapidly acting alpha-recepto blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied

Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles o 100 and 1000 tablets.

Full information is available on request.



take a new look at

Pre-Sate®

(chlorphentermine HCl)

the increasingly practical appetite suppressant

low potential for:

- ☐ stimulatory 'jolt'
- ☐ post-therapeutic 'let-down'
- ☐ excessive CNS stimulation
- ☐ drug abuse

Pre-Sate promotes normal patterns of food intake and is a safe, effective supplement to your total program of caloric reduction

Pre-Sate—a short-term adjunct... not a substitute...to your total program of weight reduction

Warner-Chilcott
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

PS-GP-11-BW

W|C

Rep. Warner, Young Artist Are Honored By Michigan Health Council

John A. Doherty, executive vice president of the Michigan Health Council, presented awards to 14-year-old Lauri Taylor of Walled Lake for the most outstanding 1971 health careers poster and to Representative Dale Warner of Eaton Rapids for his efforts in sponsoring comprehensive health legislation.

The Michigan State Medical Society co-sponsored the Health Careers Poster Contest with the Michigan Health Council.

A group of nearly 800, widely representative of geographical and professional areas, attended the 25th Michigan Health Council Congress at Albion College. While there they heard "The Albion Story," the account of the two-year-old Albion Drug Abuse Committee, aimed at combatting rampant drug abuse through effective instruction.

Morley Fraser, athletic director of Albion College and President of the Drug Abuse Committee, headed the list of committee members who recounted the project's history. He suggested, not that marijuana should be legalized now, but that penalties should be made more realistic by making possession a misdemeanor punishable by no more than 90 days or a $100 fine.

E. J. McClendon, Lansing, Special Assistant to the Superintendent of Public Instruction, urged the luncheon audience not to "confuse activity with action" concerning drug abuse programs. Instead he suggested a proposal modeled on the Albion Drug Abuse Committee, commenting "plan with care, measure its impact and take your time. Emergency action may be worse than no action at all. Going in all directions is not the thing to do."

SO MANY CHOICES
HEALTH CAREERS

John A. Doherty, executice vice-president of the Michigan Health Council, displays the winning poster of the Council's health careers poster contest with winner, 14-year-old Laurie Taylor, a Walled Lake 8th grader.

The girth control pill

Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

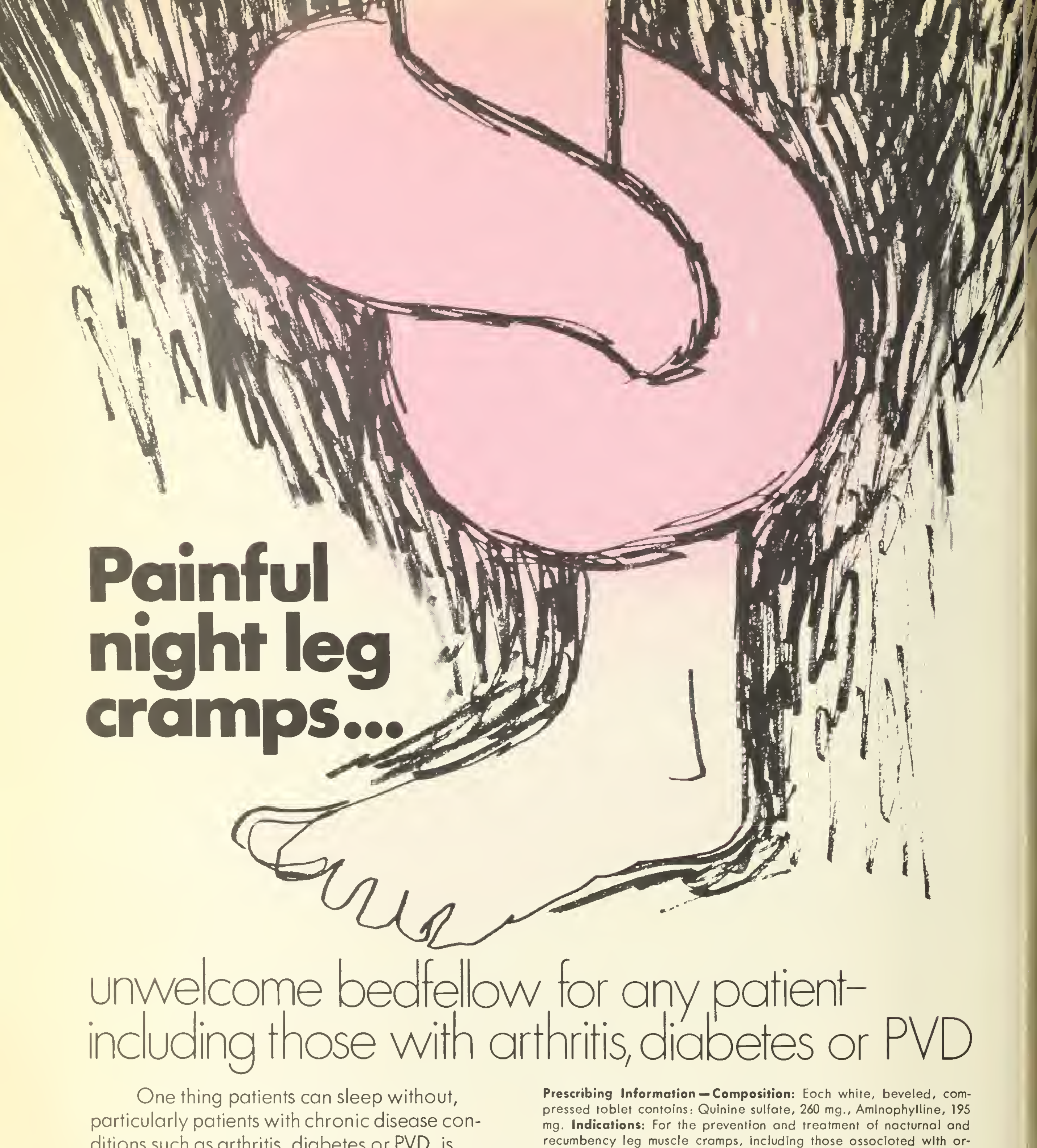
Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur in relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. Sympathomimetic *cardiovascular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-107/4/71/U S PATENT NO. 3,001,910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144



Painful night leg cramps...

unwelcome bedfellow for any patient–including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

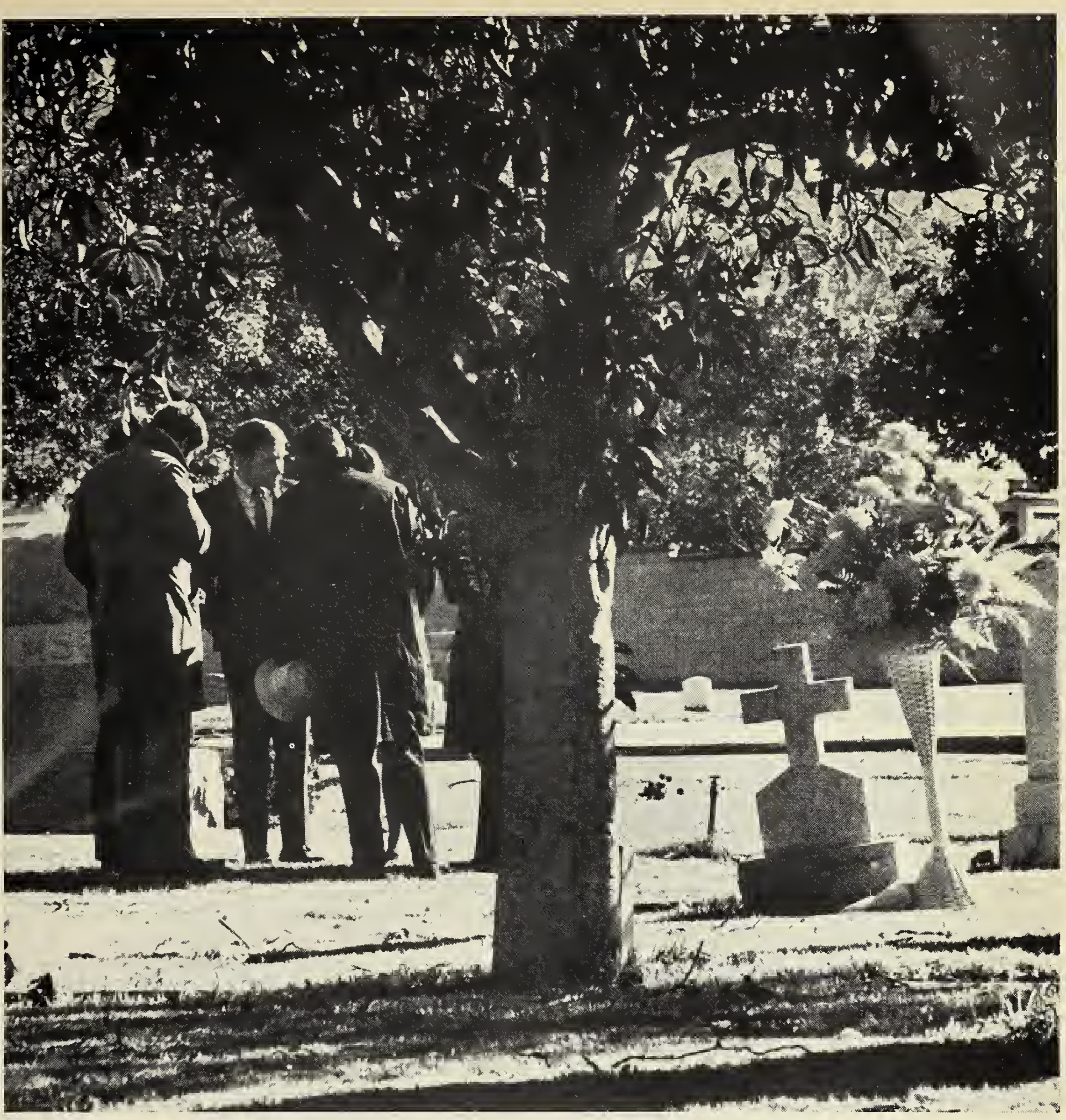
Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

Q103 2/71

Quinamm™
(quinine sulfate 260 mg., aminophylline 195 mg.)

Specific therapy for night leg cramps



Drunk drivers bring families together.

In hospital rooms and at funerals.

Because that's where the drunk driver's victims wind up.
Drunk drivers are involved in at least 25,000 deaths and 800,000 crashes every year.

And what can you do?

Remember, the drunk driver, the abusive drinker, the problem drinker may be sick and need your help.

The first thing you can do is get him off the road. For his sake and yours.

Do something. Write the National Safety Council, Dept. A, 425 North Michigan Ave., Chicago, Illinois, 60611. And your voice will be heard.

Scream Bloody Murder.

ADVERTISING COUNCIL

GREEN CROSS FOR SAFETY
NATIONAL SAFETY COUNCIL

Advertising contributed for the public good.

When irritable colon feels like this

..in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED**® provides more complete relief:

☐ **belladonna alkaloids—for the hyperactive bowel**
☐ **simethicone—for accompanying distension and pain due to gas**
☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®
antispasmodic/sedative/antiflatulent

pring peeper (tree frog, *Hyla crucifer*):
ıis small amphibian can expand
s throat membrane with air until it is
vice the size of its head.

INSOMNIA
SEDATE EFFECTIVELY

With QUĪ-A-ZONE — you can sedate effectively. A balanced combination of short, intermediate, and long-acting barbiturates (totaling 100 mg.) in a rapidly disintegrating tablet — sedation is provided within a few minutes . . . followed by sound restful sleep . . . usually without morning hangover. The four barbiturates in QUĪ-A-ZONE have dual channels of elimination (renal and hepatic) to lessen metabolic burden, decrease barbiturate retention, and minimize depression.

QUĪ-A-ZONE™

Each rapidly-disintegrating tablet contains 25 mg. secobarbital, 25 mg. pentobarbital, 25 mg. butabarbital, and 25 mg. phenobarbital. Bottles of 100.
Usual Adult Dose: 1 to 2 tablets before retiring.
PRECAUTION: Should not be administered to patients sensitive to barbiturates, or in cases of known previous addiction. Warning: May be habit forming.

W-C PRECISION PHARMACEUTICALS

SEND FOR SAMPLES.

WALKER, CORP & CO., INC.
Syracuse, New York 13201

NEW MEMBERS/Continued

A. Glenn VanNoord, DDS, 612 Mich. Nat'l Bank Bldg., Battle Creek 49014
Virinder S. Grewal, MD, 2909 E. Grand River #103, Lansing 48912
David L. Hammer, MD., 1057 Orchard Ave., S.E., Grand Rapids 49506
Ronald A. Hoekman, MD, 960 Lakeside Dr., S.E., Grand Rapids 49506
Glorificacion Medina, MD, 8425 E. 12 Mile Rd., Warren 48093
William R. Stackable, MD (Reinstatement), 2532 Spring Arbor Rd., Jackson 49203
Neill D. Varner, DO, Hemlock 48626
Roy L. Vomastek, DO, McBain 49657
Busharat Ahmand, MD, 1414 W. Fair Ave., Marquette 49855
Ricardo E. Cecchini, MD (Reinstatement), 1051 N. Adams Rd., Birmingham 48008
Martin L. Charles, MD, 828 Fisher Bldg., Detroit 48202
D. C. Fahrbach, MD, Sand Point Rd., Munising, 49862
Carl F. Hammerstrom, MD, 1414 W. Fair Ave., Marquette 49855
Maria M. Herenda, MD, 101 E. Alexandrine, Detroit 48201
Eugene W. Hildebrand, MD, Medical Center, Munising 49862
Charles A. Hill, MD, 425 E. Washington St., Ann Arbor 48108
Ralph W. Lenz, MD, 235 E. Chicago, Coldwater, 49036
Tennie M. Lunceford, MD, Eastland Prof. Bldg., #452, Detroit 48225
Joseph B. Marogil, MD, 245 State St., S.E., Grand Rapids 49502
A. G. Pagdanganan, MD, Harper Hospital, Detroit 48201
Maria Sexon-Porte, MD, 3800 Woodward Ave., Detroit 48201
Amnuay Singhakowinta, MD, 3800 Woodward Ave., Detroit 48201
Frederick C. Stebner, MD, Detroit General Hospital, Detroit 48226
Frederick A. Stone, MD, 829 Croix St., Negaunee 49866
Francisco T. Toledo, MD, St. Joseph Mercy Hosp., Pontiac 48053
Larry K. Winegar, MD, Univ. of Mich. Medical Ctr., Ann Arbor 48104
Arlene V. Winfield, MD, Wayne County General Hospital, Eloise 48132
Norman Zucker, MD (Reinstatement), 11885 E. 12 Mile Rd., Warren 48093
Hugh C. Hendrie, MD (Reinstatement), 951 E. Lafayette, Detroit 48207
Noel Lawson, MD, 22101 Moross Rd., Detroit 48236

James McKenna, MD, 573 Fisher Bldg., Detroit 48202
Sudarsan Misra, MD, 1400 Chrysler Expwy., Detroit 48207
Joseph M. Malin, MD, Detroit General Hospital, Detroit 48226
Sonjai Poonpanij, MD, 15231 W. Seven Mile Rd., Detroit 48235
Aurangzeb Sheikh, MD, 3800 Woodward Ave., Detroit 48202
Eugene Schwartz, MD, Metropolitan Hospital, Detroit 48206
Maurice S. Albin, MD, Park Davis & Co., Ann Arbor 48105
Rosita N. Aquino, MD, St. Joseph Mercy Hosp., Ann Arbor 48104
Robert Calderwood, DDS, 1st Nat'l Bank Bldg., Stephenson Ave., Iron Mountain 49801
Walter M. Decker, MD, 3535 W. 13 Mile Rd., Royal Oak 48072
Jerome E. Feldstein, MD (Reinstatement), 502 N. Crooks Rd., Clawson 48017
Milton R. Horwitz, MD, Univ. of Michigan, Ann Arbor 48104
Yuan-Chao Huang, MD, 606 N. Woodward Ave., Birmingham 48011
Susan J. Kennedy, MD, St. Joseph Mercy Hosp., Ann Arbor 48104
Walter W. Laidlaw, MD, 1840 Wealthy St., S.E., Grand Rapids 49506
Carlos M. Lauchu, MD, Ypsilanti State Hosp., Ypsilanti 48197
E. Brian McHugh, MD, 1810 Ruddiman, North Muskegon 49445
Ira Miller, MD, 1718 Hermitage, Ann Arbor 48104
Norman R. Boeve, MD, 1810 Wealthy St., S.E., Grand Rapids 49506
William S. Boutwell, MD, 967 South Shore Drive, Holland 49423
William P. Bristol, MD, 2019 Rambling Rd., Kalamazoo 49001
Harvey J. DeMaagd, MD, 3239 Lakeview Lane, N.E., Grand Rapids 49505
Roger J. Gemmen, MD, 342 West 33rd St., Holland 49423
Michael S. Leahy, MD, Midland Hospital, Midland 48640
Matthies Evans, MD, 1877 Walnut Heights Dr., East Lansing 48823
Neil D. Mullins, MD, P. O. Box 283, Bloomingdale 49026
A. Leslie Rose, MD, Doctors Park, Escanaba 49829
Carlos S. Willis, MD, 113 State Ave., Alpena 49707

CONSTIPATION
EVACUATE GENTLY

With EVAC-U-GEN — your patients with functional constipation can evacuate gently. Because EVAC-U-GEN has a mild laxative action and tends to cause the stool to be soft — it is highly desirable for those sensitive to harsh laxatives — particularly children, pregnant women, and geriatric patients. Recommend EVAC-U-GEN for the management of functional constipation. It is highly effective. Non-griping. Chewable. Very palatable. Economical.

EVAC-U-GEN®

A highly-flavored and palatable tablet of yellow phenolphthalein, bismuth subcarbonate, bismuth subgallate in special base. Chewable. Bottles of 35 and 100. Adult Dose: Chew 1 or 2 tablets night or morning. Children (up to age 10): 1/2 tablet. A citrus drink taken with tablet will stimulate action.
PRECAUTION: Do not use when symptoms of appendicitis are present and discontinue use if skin rash appears. Dependence on laxatives can result from continued use.

W-C
PRECISION PHARMACEUTICALS

SEND FOR SAMPLES.
WALKER, CORP & CO., INC.
Syracuse, New York 13201

County societies

Calhoun doctors busy with two major projects

Calhoun County Medical Society members have had two major projects lately. They co-sponsored with the Calhoun County Unit, Michigan Division of the American Cancer Society, the 28th annual local program for the Advancement of the Study of Control of Cancer. Outstanding area cancer society volunteers were honored.

Early in April, the county society members and their wives presented the Doctors' Art Show at the Battle Creek Civic Art Center. The show was arranged by the Woman's Auxiliary to the medical society.

Begin Genesee TV Series

The Genesee County Medical Society began in late May a new public service series of half-hour television programs entitled "You and Your Health." The taped color programs will be carried over cable TV. Each program is shown three times a week for two weeks—Mondays at 4:30 p.m., Wednesdays at 9 a.m. and Fridays at 6 p.m.

Richard L. Rapport, MD, moderated the opening program of the series. Harold H. Hiscock, MD, president of the Michigan State Medical Society, and James F. Dooley, MD, president of the county society, were panelists. Their discussion focused on the goals of the series and current developments in health problems. The second program, centering on the community drug abuse problem, was moderated by John C. Chogich, MD. Roderic R. Abbott, MD, and Ronald Chen, MD, Genesee County commissioner of mental health, served as panelists.

The TV series will stress the importance of good health and will establish more productive channels of communication between doctors and the public. Topics for future programs included community health, industrial health care, progress against cancer, health quackery and health careers. Viewers were invited to submit topic suggestions for later programs.

Bay Doctors Help Migrants

The Bay County Medical Society is supporting again the summer medical-dental clinic program offered at General Hospital for area migrant workers. The clinic operates several evenings each week staffed by doctors, nurses, and bilingual health aides. Members of the Bay County Medical Society are among those volunteering their services. Last year's 674 patients made 1,183 visits to the clinic, financed by federal funds. Nearly 300 referrals to hospital outpatient departments or specialists were made.

Michigan Authors

BOOKS

James L. Curtis, MD, New York, *Blacks, Medical Schools, and Society,* The University of Michigan Press, Ann Arbor, Mich. 1971. A comprehensive study evaluating the current status of the black medical student in America. Doctor Curtis discusses the need to lower the "color barrier" in medicine and traces the increase in enrollment of black students in medical schools and the changing attitudes toward their career goals. Topics range from a survey of black history perspectives to recruitment of medical students and their professional futures.

William C. Grabb, MD, Ann Arbor, Sheldon W. Rosenstein, DDS, Chicago, Kenneth R. Bzoch, PhD, Gainesville, Editors, *Cleft Lip And Palate—Surgical, Dental, and Speech Aspects.* A complete text dealing with the treatment of persons born with clefts of the palate and prepalate. Includes techniques of many professional disciplines which make it an extremely comprehensive study.

ARTICLES

Milton J. Steinhardt, MD, Detroit, *"Modes of Therapy in Emotional Aspects of Respiratory Dysfunction,"* pp. 169-172, Psychosomatics, Vol. 11 No. 3, May-June 1970.

Medicolegal

The AMA's *Citation* Newsletter, prepared by the AMA Law Department, lists the following cases involving health personnel in Michigan. Persons interested in obtaining more information on individual cases may write MSMS Headquarters.

Urologist's Own Testimony Shows
Malpractice In Resection
Michigan Court of Appeals, Oct. 28, 1970
from the June 1, 1971 *Citation*

Damages For Failing To Notify
Son Of Mother's Terminal Illness
Michigan Court of Appeals, April 23, 1969
from the June 1, 1971 *Citation*

MSMS at work...

...SERVING DOCTORS, PUBLIC IN MANY WAYS

The Michigan State Medical Society serves some 8,000 doctors and the people of Michigan.

The Society conducts programs to advance the professional and economic affairs of its members and to provide specific personal services.

A House of Delegates, the governing body, represents the component societies of MSMS and decides policy positions.

Interaction with all phases of the medical profession is maintained through 80 permanent and ad hoc committees. A 10-member judicial commission, elected by MSMS membership, oversees ethical principles within the society.

MSMS programs include post-graduate medical education, legislative relations, socio-economics, etc.

Members receive a monthly journal, **Michigan Medicine,** and other pertinent publications.

The MSMS headquarters in East Lansing is a distinctive building designed by noted Michigan architect, Minoru Yamasaki.

The decisions of MSMS—the one organization representing the state's entire medical profession—influence the entire medical and health industry.

Michigan State Medical Society

In memoriam

Morris Bachman, MD
Southfield

Morris E. Bachman, MD, an obstetrician who was born in Russia and was a resident of the Detroit area for the past 53 years, died June 16 at the age of 71. Doctor Bachman was graduated from the University of Michigan Medical School in 1926 and served on the staffs of Hutzel and Sinai Hospitals. He was also an associate professor at the Wayne State University School of Medicine.

A member of the American College of Obstetrics and Gynecology, a Diplomat of the American Board of Obstetrics and Gynecology, and a Fellow in the American College of Surgeons, Doctor Bachman was also a founder and past president of Phi Lambda Kappa medical fraternity and a past president of Maimonides Medical Society. He founded and was the first president of the Town and Country Club and was a member of the Perfection Lodge No. 486 F & AM.

Paul John Benson, MD
Plymouth

Paul John Benson, MD, Plymouth, a staff member with the St. Joseph Mercy Hospital department of obstetrics and gynecology since 1964, was killed June 16 in an automobile accident at the age of 40. Doctor Benson, a native of Ann Arbor, was graduated from the University of Michigan Medical School in 1959. He took his internship at St. Joseph Mercy and partially completed his residency duties in obstetrics and gynecology at the University of Vermont. He completed his residency at the Ann Arbor hospital and became a staff member there in 1964. Doctor Benson had also established a private practice in Plymouth.

George C. Chittendon, Sr., MD
Detroit

George C. Chittendon, Sr., MD, a urologist who practiced in Detroit for 35 years before moving to Florida about 10 years ago, died June 9 at the age of 70. Doctor Chittendon was graduated from the Indiana University Medical School and took his residency in urology at Ford Hospital in Detroit. He served on the staff there after completion of his residency duties and later was a staff member at Jennings Hospital.

Niles A. Clarke, MD
Brighton

Niles A. Clarke, MD, died at the age of 63 May 17 at St. Joseph Mercy Hospital in Ann Arbor, following an extended illness.

Doctor Clarke was a 1933 graduate of the Detroit College of Medicine and Surgery. He was a member of the Michigan National Guard (Red Arrow Division) and served as a flight surgeon with the U.S. Army Air Corps in the Far East during World War II.

Doctor Clarke was a staff member at McPherson Community Health Center in Howell. He was a member of the American Medical Association, Brighton Lodge No. 247 F&AM, Elks Lodge No. 2168 BPOE of Howell, the Jesse B. Cooley Post No. 235 American Legion of Brighton, and the Michigan State Medical Society.

Memorial contributions in Doctor Clarke's name may be made to the Doctor Niles A. Clarke Scholarship Fund, c/o McPherson Community Health Center, Howell. Military committal services were held at Woodmere Cemetery, Detroit under the auspices of members of the Mich. National Guard.

L. David Comstock, MD
Dowagiac

L. David Comstock, MD, former chief of staff at Lee Memorial Hospital and a well known community leader, died June 8 at the age of 48 of a heart ailment.

Doctor Comstock had practiced medicine in Dowagiac for 19 years. He attended Vanderbilt and Yale Universities and received his medical degree from the University of Chicago Medical School. His undergraduate degree was obtained from the University of Chicago, also. Having taken his internship at Blodgett Hospital in Grand Rapids, Doctor Comstock came to Dowagiac in 1952. He established a practice with Rudolph R. Clary, MD, and was highly instrumental in the establishment of the Coronary Care Unit in Lee Memorial Hospital in 1968. He underwent special training in Chicago relevant to operation of the unit, one of the first such facilities to be initiated in a rural hospital in Michigan.

Doctor Comstock's civic contributions were numerous and included five years of service on the Dowagiac Union School District Board of Education and one year as board president. In addition, he served as the first president of the Dowagiac Human Relations Commission and as a member

(Continued on Page 760)

check these figures...

they could lead to savings

Umbrella Excess Liability Policy — Our Schedule

- ✓ Physicians Class 1 & 2 . . $121.00 Annual Premium*
- ✓ Physicians Class 3, 4 & 5 . $205.00 Annual Premium*

* The above premiums assume ownership or use of 2 residences, 2 automobiles, professional liability exposure (basically insured for $100,000/$300,000), and professional office premises exposure. These premiums do not include basic Malpractice coverage. The Umbrella plan is sponsored by the Michigan State Medical Society while the basic Malpractice policy is not.

CALL US COLLECT (517) 484-2578

---

bps **BEN P. STRATTON AGENCY, INC.**
ESTABLISHED IN 1937

107 N. BUTLER BLVD.
LANSING, MICHIGAN 48903
(517) 484-2578

19400 WEST TEN MILE ROAD
SOUTHFIELD, MICHIGAN 48075
357-5083

of the advisory committee of Southwestern Michigan College's Licensed Practical Nurse Program.

He was a member of the Cass County Medical Society, the Michigan State Medical Society, the American Medical Association, and the American Heart Association. Doctor Comstock was also a member of the Honorary Medical Fraternity, AOA, in his junior year at medical school.

Contributions to the L. David Comstock, MD, Memorial Medical Education Foundation, established to further medical education in general practice in Cass County, may be sent to the First National Bank of Southwestern Michigan.

C. Ford DeVries, MD
Lansing

C. Ford DeVries, MD, a Lansing surgeon for 47 years, died June 29 at the age of 75.

In 1968 Doctor DeVries had retired after serving for nearly 30 years as Federal Aviation Administration medical examiner. His other positions included that of medical director at Diamond Reo since 1925 and medical examiner for Selective Service. Doctor DeVries also served as a past president of the Ingham County Medical Society and the Michigan State Medical Society. He had been chief of surgery at Sparrow and St. Lawrence Hospitals and chief of staff at St. Lawrence Hospital.

Doctor DeVries was a member of the American College of Surgeons and came to Lansing in 1921 after graduating from the University of Michigan Medical School. He was a life member of Lansing Lodge 196, BPOE,, Elks and a former member of the Lansing City Club, Automobile Club and the Lansing Country Club.

Memorials in memory of Doctor DeVries may be made to either Sparrow Hospital or St. Lawrence Hospital.

Joseph J. Dubin, MD
Southfield

Joseph J. Dubin, MD, industrial physician for the Ford Motor Company since 1961, died May 31 at the age of 63.

Doctor Dubin was graduated from the Detroit College of Medicine in 1933 and practiced privately 28 years before his affiliation with Ford. He was a member of several medical organizations, including the Maimonides Medical Society, the Michigan Industrial Medical Society, MSMS.

Doctor Dubin was a staff member of Northwest Grace Hospital, Detroit, and Mount Carmel Mercy Hospital, Detroit.

Forrest Ostrander, MD
Grand Marais

Forrest Ostrander, MD, of Grand Marais, died May 31 in Grove City, Ohio at the age of 82. He had been born in Milan, and went to Grand Marais as a boy. Doctor Ostrander practiced pharmacy in a number of Michigan communities before completing work on his MD degree. Doctor Ostrander served as a medical officer in the U. S. Army for 32 years and retired in 1950 with the rank of Colonel.

Charles E. Reddick, MD
Sault Ste. Marie

Charles E. Reddick, MD, Sault Ste. Marie, a former director of the Bay County Health Department, died in Wausau, Wisconsin, at the age of 73. He had been en route to Minnesota with his wife at the time of his death. Doctor Reddick had retired in Bay City in 1963 after 10 years of service as county health director. He then moved to Sault Ste. Marie where he served as head of the Chippewa County Health Department until 1969. Doctor Reddick was graduated from the University of Louisville's Medical School in 1924 and had served at the Mayo Clinic before his arrival in Bay City. He was a past president of the Michigan State Public Health Officers Association, and was a member of the vestry and men's club at Trinity Episcopal Church in Bay City.

Earl A. Thayer, MD
Jackson

Earl A. Thayer, MD, Jackson physician and surgeon, died June 11 in Foote Hospital following surgery.

Doctor Thayer was graduated from Oberlin College and the University of Michigan Medical School and interned for two years at Foote Hospital before entering private practice in 1923. He was also the chief physician and surgeon for Penn Central Railroad for several years.

A past president of the Jackson County Medical Society, a member of the Michigan State Medical Society, and a member of the American Medical Association, Doctor Thayer also belonged to the University of Michigan Alumni Association and was a life member of the Michigan Union of the University of Michigan. In addition, he was a 50-year member of the American Legion Richard F. Smith Post No. 29. During World War 1 he served with the enlisted medical corps. Other organizations in which he held memberships included Fern Leaf Chapter No. 66, OES, Jackson Commandery No. 9, and Moslem Temple, Jackson Shrine Club.

Andrew Van Solkema, MD
Grand Rapids

A general practitioner in Grand Rapids for 43 years, Andrew Van Solkema, MD, died shortly after returning from a winter in Florida on May 30 at the age of 72.

A native of the Netherlands, Doctor Van Solkema arrived in Grand Rapids in 1904. A graduate of Calvin College and the University of Michigan Medical School, he served in the army during World War I.

Doctor Van Solkema was a member of the Kent County Medical Society, MSMS and the AMA. He was also a member of Calvary Reformed Church, of which he was a past deacon and elder.

A member of the Kent County Medical Society since 1930, Doctor Van Solkema became a Life Member of that organization in 1969.

Thomas P. Waring, MD
Baraga

Thomas P. Waring, MD, orthopedic surgeon at the Moyer Diagnostic Clinic in Baraga, died May 15 at the age of 54.

Doctor Waring attended Washington and Lee University and was graduated from the Yale School of Medicine in 1942. Having taken his internship and residency at the University Hospital in Ann Arbor, he served in the U. S. Army as an orthopedic surgeon from 1943-46.

In June, 1949 Doctor Waring began private practice as an orthopedic surgeon with his wife, Ruth Moyer Waring, MD, in Savannah. In September, 1970 the couple moved to Baraga to affiliate with the Moyer Clinic.

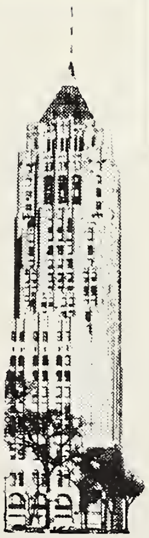
A diplomat of the American Board of Orthopedic Surgery since 1951, and a fellow of the American Academy of Orthopedic Surgeons, Doctor Waring was also affiliated with St. Joseph's Hospital in Hancock.

His wife, Doctor Ruth Moyer Waring, was a sister of the late Doctor Carl Moyer.

PERFECT
MAKES
PRACTICE.

And "perfect" is what the Fisher Building offers a professional practice: Unmatched office facilities; indoor parking contiguous to your office; a location that's easy for you and your patients to reach from the entire metropolitan area. You're near the many specialists in the profession, as well as labs and hospitals, making internal referrals most practical for both patient and physician. Near, of course, to shops and restaurants, to a bookstore and banks and a post office, and the magnificent Fisher stage. It's an atmosphere to accomplish things in. Call us now for diagnosis and consultation on your office needs. As our patient you will find your office problems cured!

THE FISHER BUILDING
Across from General Motors Building
Detroit 48202 • Phone 874-4444



HOSPITAL-MEDICAL
PLANNING, INC.
Alco Universal Building
East Lansing, Michigan
48823
517 332-1333

PROFESSIONAL
PERSONNEL RECRUITMENT
FOR
HOSPITALS CLINICS UNIVERSITIES
Administrators, Physicians,
Dept. Heads

PHYSICIANS — ALL SPECIALTIES

At no financial obligation, let us present your resume to our clients. As Planning & Personnel Consultants, we serve fine Hospitals, Clinics, Universities, and Health Planning Agencies in the Great Lakes Region. We advise physician candidates in depth about a variety of the best opportunities available to assist in making the best decisions.

WANTED: COMPANY FAMILY DOCTOR

We are assisting a blue-ribbon company with 700 employees in searching for a Physician to be "Company Family Doctor" for the employees and their families. This is a fine opportunity to initiate a new program in a location away from the heavy urban pressures. Mail your resume in confidence or call Arthur A. Lepinot.

Classified Advertising

$5.00 per insertion of 50 words or less, with an additional 10 cents per word in excess of 50.

GENERAL PRACTITIONERS—Community of Mt. Pleasant, Michigan desirous of securing 4 general practitioners. Good hospital privileges available. 125 bed, fully accredited. Excellent consultants available in community. Mixed M.D., D.O. Staff. Active staff of 28 physicians. Community of 22,000. Site of Central Michigan University, 14,500 students. Four season area. Metropolitan areas within 50 miles. Service area of 75,000. Five G.P.'s in active practice. Community will assist actively in helping you get established. Call collect R. E. Pieratt, Adm. (517) 773-7941 or Frank Johnson, M.D., Chairman Recruitment Committee, area (517) 772-4846.

RADIOLOGIST Board Certified desires to practice in northern Michigan below the upper peninsula. Prefer solo practice but will consider all opportunities. Send replies to Box #6, 120 W. Saginaw Street, East Lansing, Michigan 48823.

NEW EXPANDING OPPORTUNITIES for family physicians and physicians specializing in pediatrics and internal medicine in medically awakened community. Contemporary, automated 110 bed new hospital. Patient service area 50,000 people. Medical staff leading and supporting recruitment efforts. Excellent community location, 40 miles equidistant to Milwaukee and Madison, Wisconsin. Complete educational, cultural and recreational facilities. New medical dental building and 130 bed skilled hospital care nursing home adjacent to the new hospital now ready for occupancy. Immediate satisfaction in practice, income and family living. Special assistance if needed. Write or call Dr. Paul R. Glunz, Watertown Memorial Hospital, Watertown Area Health Care Center, Watertown, Wisconsin 53094. Tel.: (414) 261-4210 for more information.

INTERNISTS needed now in a central Michigan college town with service area of 40,000. Expanding hospital affiliated with MSU school of medicine, young progressive staff including three internists and wide specialty representation make this an attractive opening. Modern office space adjacent to the hospital. No investment required and association available. Call collect or write: Wilmer M. Rutt, MD, 245 Warwick Drive, Alma, Michigan 48801—(517) 463-1866.

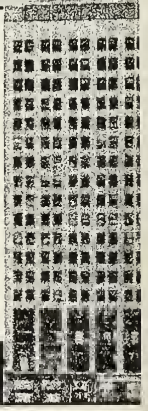
E. N. T. SOLO PRACTICE: Very active solo E. N. T. Practice in Downriver, suburban Detroit, available immediately due to accidental death. Building, Land, complete E. N. T. and office equipment with terms. Previous owner on staff of three hospitals, each within five minutes of office. Unrivaled opportunity to start now in a busy practice which is a going concern. Call (313) AV 5-4030.

MEDICAL TECHNOLOGISTS, ASCP or eligible and experienced Dytology, Histology technologists needed for expanding clinical laboratory, 460 bed general Hospital. Start $693.00 per month, increases to $900. Paid vacations, insurance and holidays. Write or apply Personnel Department, Edward W. Sparrow Hospital, 1215 E. Michigan Ave., Lansing, Michigan 48912.

URGENTLY NEED INTERNIST and/or cardiologist to establish practice in area due to death of a local physician. Come to Dowagiac, Cass County, with 182 lakes, ideally located in Southwestern Michigan, anly 2 hours from Chicago and half an hour from South Bend, Indiana. Only accredited hospital in Cass County. 60 beds, ICU-CCU units. Early expansion to 100 beds is planned. Town of 8,000. Fishing, swimming, excellent environment for children, with Junior College. Direct all responses to Robert O'Keefe, Administrator, or call collect (616) 782-7532. Lee Memorial Hospital, Dowagiac, Michigan 49047.

FOR SALE—Completely furnished 2 bath modern year round home on spring fed lake, 6 miles west of Gaylord. 100' lake frontage on ¾ acre wooded site on county maintained road. Owner: P. O. Box 93, Gaylord, Michigan 49735 or Phone (616) 546-2653.

Advertisers in MICHIGAN MEDICINE are friends of the profession. By accepting their advertising we show confidence in them, their services and products. They help make the journal a quality publication. Please familiarize yourself with their services and products and let them know that you see their advertising in MICHIGAN MEDICINE.



THE FINEST NAME IN MEDICAL - DENTAL ARTS

THE DAVID WHITNEY BUILDING

WOODWARD AT GRAND CIRCUS PARK AND WASHINGTON BOULEVARD

IMMEDIATE OCCUPANCY • VARIOUS SIZE SUITES AVAILABLE

THE DAVID WHITNEY BUILDING CONTAINS DETROIT'S FINEST MEDICAL, DENTAL AND X-RAY LABORATORIES PLUS A PHARMACY FOR YOUR CONVENIENCE, LOCATED MINUTES FROM THE NEW DETROIT MEDICAL CENTER. • AUTOMATIC ELEVATORS • BARBER SHOP • SNACK SHOP • BANK • COMPLETE BUILDING SECURITY • FINEST PERSONALIZED JANITORIAL AND MAINTENANCE INCLUDED • ADJACENT TO LARGE PARKING GARAGE • SPECIAL RATES TO NEW DOCTORS

hayman management company 962-3058

Horizons Unlimited

MSMS members may obtain copies of the AMA "Horizons Unlimited" career handbook with an eight-page Michigan insert by writing to MSMS, P.O. Box 152, East Lansing 48823.

Index to Advertisers

American Medical Association 751
Arch Laboratories 735
Arnar-Stone Labs. Inc. 723
Brown Pharmaceutical Co. 743
Burroughs-Wellcome & Co. 737
Campbell Soup Co. 713
Classified Advertising 762
Cytology Laboratories 695
David Whitney Bldg. 762
Dow Chemical Co. 740, 741
Fisher Bldg. 761
Geigy Pharmaceuticals 690
Hospital Planning, Inc. 761
Import Motors Limited, Inc. .... Cover III
Lilly, Eli & Co. 698
Mead Johnson Laboratories 728, 729
Medical Protective Co. 694
Mercywood Hospital 763
Michigan State Medical Society 725
National Drug Co. 717, 718, 749, 750
Pharmaceutical Mfg. Assoc. 719
Robins, A. H. Co. 738, 739
Roche Laboratories .... Cover II, 689, 736, Cover IV
Searle, G. D. Co. 714, 715
Smith Kline & French Labs 716
Stratton, Ben P. 759
Stuart Pharmaceuticals (Div. of Atlas Ind.) 752, 753
Upjohn Company 696, 697, 732, 733, 734
USV Pharmaceuticals 720, 721
Walker Corp. 754, 755
Warner Chilcott (Div. of Warner Lambert) 746, 747
Willingway, Inc. 764

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road **Conducted by Sisters of Mercy** Ann Arbor, Michigan

Telephone — 313 663-8571

Mercywood Hospital is a private neuropsychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multi-disciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs

PSYCHIATRIC STAFF

Lyle M. Allis, M.D.
Robert J. Bahra, M.D.
Dean P. Carron, M.D.
Francis M. Daignault, M.D.
Gordon C. Dieterich, M.D.
James R. Driver, M.D.
Alexander P. Dukay, M.D.
Robert L. Fransway, M.D.
Stuart M. Gould, Jr., M.D.
Leonard E. Himler, M.D.*
Sydney Joseph, M.D.
Hubert Miller, M.D.
Jacob J. Miller, M.D.
Rudolf Nobel, M.D.
Gerard M. Schmit, M.D.
Prehlad S. Vachher, M.D.
Richard D. Watkins, M.D.

*1904-1967

WILLINGWAY

311 JONES MILL ROAD
STATESBORO, GEORGIA

TELEPHONE
(912) 764-6236

LONG TERM THERAPY OF DRUG DEPENDENCY CONDITIONS

Willingway Hospital is a new facility, the first complete hospital to be constructed under the Georgia Hospital Rules and Regulations, revision of November 24, 1969, authorizing residential type units.

Located at the city limits in east Statesboro on an eleven acre tract of woodland in a quiet, secluded area containing a lake, the single story, multi-level hospital consists of a detoxification section and a residential care section. The detoxification unit is equipped and staffed for the withdrawal treatment of any type of intoxication including alcohol, narcotics, sedatives, tranquilizers and other drugs or combinations.

The residential care unit is composed of 26 private rooms with private baths convenient to a comfortable lounge and arranged to achieve an intimate home-like atmosphere. All living units are individually decorated and furnished. No two are alike. Wall to wall carpet throughout.

There is a large day room, inside and outside patios, a dining room where home cooked meals are served, a library and conference rooms. The building is all electric, completely air conditioned with individual controls, and is protected by a modern sprinkler system in all areas.

Male and female patients are admitted to the detoxification unit for withdrawal. When this phase is completed, they are transferred to the residential care unit for continuation of rehabilitative therapy.

The Willingway treatment program operated successfully at another location in Statesboro for four years before moving to the new facility.

Requirements for admission. To be admitted all new patients must agree to the following:

1. Stay 28 days.
2. No telephone calls.
3. No visitors.
4. No automobiles.
5. Pay for 28-day program at time of admission.

Incoming and outgoing mail is not restricted. Mail is not read or censored. No one is admitted for detoxification only.

For rates and information write to:

WILLINGWAY
P. O. Box 508
Statesboro, Ga. 30458

John Mooney, Jr., M.D.
Medical Director

Mrs. Dorothy R. Mooney
Administrator

Member Georgia Hospital Association

Sports Conference Aids Team Physicians, Coaches, Trainers

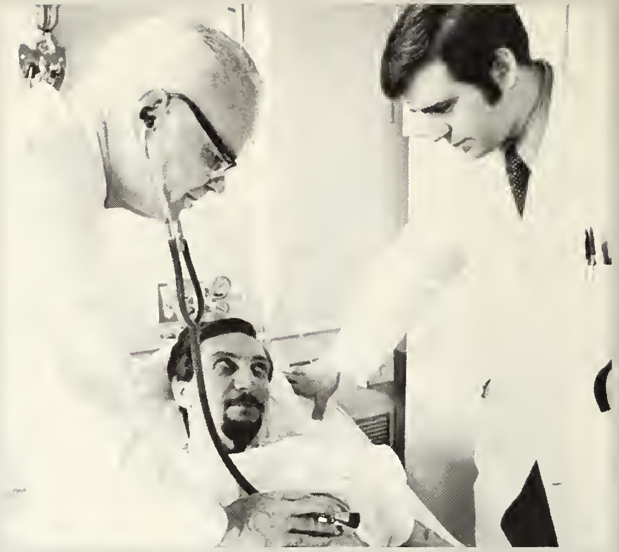
Left to right, James S. Feurig, MD, Michigan State University team physician, who presided over the conference, "Bo" Schembechler, head football coach, University of Michigan, and Gerald A. O'Connor, MD, chairman, MSMS Committee on Medical Aspects of Organized Athletics and team physician, University of Michigan, exchange viewpoints on the medical problems attendant to school athletics. Mr. Schembechler's luncheon speech was entitled "The Coach and His Personal Physical Condition."

Gaius Clark, left, MD, President of the Michigan chapter of the American College of Emergency Physicians, chats with Allen W. Bush, State Director of Athletics, Michigan High School Athletic Association, during a break between conference activities.

Gene Washington, left, end with the Minnesota Vikings and L. W. Combs, MD, Purdue University team physician and the major speaker at the spring event, discuss possible misuse of stimulant and ergogenic drugs in high school athletics.

Coaches, team physicians, and team trainers listen to speakers at the 1971 Conference on the Medical Aspects of High School Sports in Kellogg Auditorium, Michigan State University. Issues ranged from drugs in athletics to women in competitive sports.

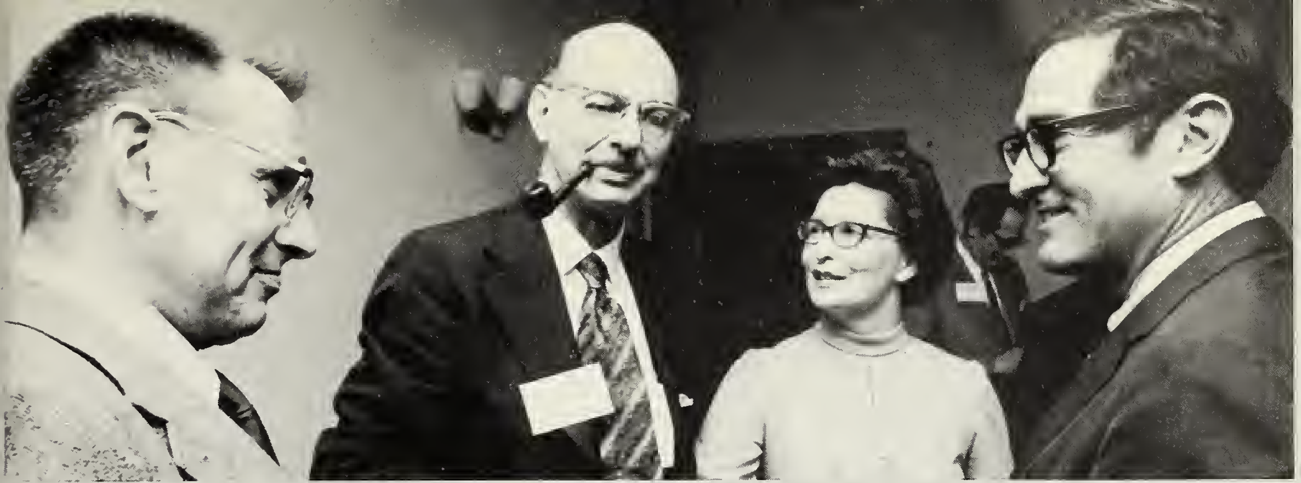
At right, Ernest W. Reynolds, Jr., MD, left and J. A. Bryan, MD, care for a patient in the University of Michigan Hospital Coronary Care Unit. The remodeled and expanded unit opened recently with new patient monitoring devices paid by a $100,000 Kellogg Foundation grant. A further Kellogg grant of some $380,000 will finance a statewide coronary care demonstration supervised by Doctor Reynolds at 36 small to medium-size Michigan hospitals which will be assisted in opening their own Coronary Care Units.



Below, Adjustments on a temporary pacemaker for a patient in the Coronary Care Unit are explained by Joseph A. Walton, MD, an assistant professor, to three residents in internal medicine, left to right, Doctors David G. Marsh, Gerald J. Smallberg, and Ronald L. Wolfson.

U - M Coronary Unit A Model For Other Hospitals

Esther Dale, MD, and Maurice Croll, MD, both Detroit physicians, were named Distinguished Service Alumni at the 1971 Wayne State University Medical School Alumni Day. Doctor Dale was named for her work in cancer detection and Doctor Croll was cited for his contributions in eye surgery, his specialty. At left is Zachary Veldhuis, a Hamilton, Mich., veterinary surgeon who received a special citation. Doctor Veldhuis is 102 years young.



Rep. Joyce Symons, D-Allen Park, Chairman of the Michigan House of Representatives Committee on Mental Health, was guest at a recent meeting of the MSMS Mental Health Committee. Left to right are Gordon Yudashkin, MD, Director, Michigan Department of Mental Health; Jacques S. Gottlieb, MD, Director, Lafayette Clinic; Mrs. Symons; and Allen Enelow, MD, Chairman, MSU Department of Psychiatry.

Legislators Confer With Public Health, Mental Health Committees

Guests at a recent meeting of the MSMS Public Health Committee were, left to right, Rep. Raymond Hood, D-Detroit, Chairman of the Michigan House Committee on Public Health, and Rep. Lucille McCollough, D-Dearborn, Vice Chairman of the Public Health Committee and Chairman of the House Committee on Education.

Harry Peterson, of the AMA staff, discussed the Medicredit proposal at the annual meeting of the Michigan Public Health Association in Grand Rapids. MPHA presented a panel of experts to discuss health insurance legislation.

Physician Assistant Proposal Studied

Conference speakers included, left to right, C. Allen Payne, MD, President, Board of Registration in Medicine, George G. Mallinson, PhD, Dean, Graduate College, Western Michigan University, Rep. Jackie Vaughn, III, and E. J. McClendon, EdD, special assistant superintendent of the Michigan Department of Education. Representative Vaughn explained his hopes in introducing bills to regulate physician assistants.

T. F. Zimmerman, PhD, Assistant to Director of Medical Education, AMA, Chicago, was one of the speakers at the Conference On Physician's Assistant at MSMS Headquarters, attended by about 40 physicians and other interested participants. He discussed the physician assistant development nationally.

Rep. Melvin DeStigter, Hudsonville, foreground, listens to one of the speakers during the morning session of the conference. MSMS called the conference to permit Represntative Vaughn and others to discuss the many ramifications of training and using physician assistants in Michigan. MSMS has supported the concept for several years and has an advisory committee working with Western Michigan University in its proposed program.

Participants in the Physician Assistant Conference included, left to right, Harold DePree, MD, Kalamazoo, MSMS Physician Assistant Advisory Committee to Western Michigan University, John Wick, RN, President, Michigan Nurses Association, Julien Priver, MD, President, Michigan Hospital Association, and Charles Harmon, Executive Director, Michigan Department of Licensing and Regulation. Western Michigan University recently received a federal grant which will allow the directors of the program there to proceed as scheduled with their future plans.

Michigan Medicine
Breaking News: Deadline, July 21
August 1971, Volume 70, Number 19
Michigan State Medical Society

House of Delegates committees readying 1971 session

The 1971 MSMS House of Delegates annual meeting is taking shape under the direction of Vernon V. Bass, MD, Saginaw, speaker of the house. The approximately 190 delegates from MSMS component societies around the state will gather Oct. 3-5 at the Civic Auditorium, Grand Rapids.

James J. Fryfogle, MD, Detroit, is vice speaker of the House. In charge of major portions of business are David J. Millard, MD, Paw Paw, chairman of the House Committee on Constitution and Bylaws; Donald D. Finlayson, MD, Sault Ste. Marie, Certificates of Commendation chairman; James J. Lightbody, MD, chairman of the Committee on Compensation of Officers, and Edward E. Elder, Jr., MD, Pontiac, chairman of the Committee on Proceedings of the House.

September 15 has been set as the target date to mail the handbook to the members of the MSMS House of Delegates for the fall session. Preliminary informational material will be sent out September 1.

The MSMS House will meet this year in Grand Rapids on Sunday, October 3 through Tuesday, October 5. The Annual Scientific Session will follow in Grand Rapids Wednesday and Thursday, October 6 and 7.

John B. Bryan, MD, Royal Oak, is serving this year as coordinator for speakers, and John W. Moses, MD, Detroit, as coordinator for programs.

Leaders of the various specialty sections are cooperating in the planning efforts.

Corporation formed for resident training programs

Michigan State University and Lansing hospitals have formed a corporation to attract more physicians for resident training programs. Articles of incorporation have been approved by St. Lawrence and Sparrow Hospitals and the MSU Board of Trustees.

The first residency to be established will be in pediatrics, tentatively slated for 1972. Residents will be assigned at Sparrow and St. Lawrence Hospitals and the MSU Genetics Counseling and Referral Clinic.

The corporation is unusual in that it makes equal partners of local hospitals and the university, said Donald Weston, MD, MSU College of Human Medicine associate dean. "This will encourage cooperation and make the whole

OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Grand Rapids, Michigan, October 3-5, 1971. The provisions of the Constitution and Bylaws and the Official Program will govern the deliberations.

Harold H. Hiscock, M.D.
President

Ross V. Taylor, M.D.
Council Chairman

Vernon V. Bass, M.D.
Speaker

James D. Fryfogle, M.D.
Vice-Speaker

Attest:
Kenneth H. Johnson, M.D.,
Secretary

CAPSULES

The new MSU College of Osteopathic Medicine will share in the administration of 13 existing MSU departments and will have two departments of its own—in osteopathic medicine and in family and community medicine. MSU reports that 35 new osteopathic students will be admitted this fall while sophomores and juniors will continue at their Pontiac-based school and in osteopathic hospitals.

* * *

A. H. MacGregor, MD, White Pigeon, was awarded a second-place ribbon for a watercolor shown at the art exhibit at the AMA Convention in Atlantic City.

* * *

Libby Golden, who lives in Harper Woods with her physician husband, Alfred Golden, MD, is the artist who created the serigraph (silk-screen print) "The Rib Cage" which appeared on the cover of the June 28 issue of JAMA. The process requires a separate stencil for every color and line in each print, requiring Mrs. Golden to use as many as 100 screens. Born in New York City, Mrs. Golden was graduated from Cooper Union and also attended the Art Students League, New York University, Hunter College and Pratt Graphic Arts Center. Her works are in the permanent collections of the Detroit Institute of Arts, Philadelphia Museum of Art, Grand Rapids Art Museum, Colby College Art Museum, and many private collections. Twelve of her serigraphs were chosen for the "U.S. Art in the Embassies" program.

* * *

Members of U. S. minority groups are being encouraged to choose careers in public health at the University of Michigan through a program of aggressive recruitment of students and various kinds of assistance after enrollment. U-M has a three-fold approach—recruitment, financial support, and academic assistance.

* * *

A unique program to give newly-graduated administrators a top-level view of health care management has been instituted by Edward J. Connors, director of the University of Michigan Hospital. The first appointee to a two-year fellowship in hospital administration is David J. Campbell, 24, Ann Arbor, who recently completed his master's degree in the field at the U-M.

Career Referral Directory Offered

Physicians interested in counseling young people who wish to enter health careers or who express a desire to investigate the possibility of such a career, may obtain a comprehensive pamphlet listing full titles and addresses of several health fields and organizations by writing to: John A. Doherty, Executive Vice President, Michigan Health Council, P.O. Box 1010, East Lansing, Mi. 48823.

greater than the sum of its parts," Doctor Weston pointed out.

Doctor Weston emphasized the necessity for integrating community and university resources in a community training program. Community-wide nonprofit corporations facilitate a sharing of many community resources, he commented.

MSMS Rural Health Chairman evaluates Copper Country MD shortage

Donald R. McCorvie, MD, Williamston, MSMS chairman, Rural Health Committee, and John A. Doherty, executive vice president, Michigan Health Council, met July 9 at the Douglass Hotel in Houghton with Copper Country hospital and medical leaders to discuss the shortage of physicians in the area. Recommendations were made to distribute nationally through the Michigan Health Council several pamphlets and brochures describing both community needs and attractions in the hope of bringing more physicians to that area. Both family physicians and specialists are in demand at the present time. Doctor McCorvie reviewed promotion material which has been successful in drawing physicians and medical personnel to less populated areas of the state.

AMA updates objectives

The goals of the AMA were updated at the recent summer AMA House of Delegates meeting in Atlantic City.

The delegates adopted a report of the AMA Council on Long Range Planning and Development which included these objectives for the AMA:

1. To maintain an active, viable organization representing the majority of physicians of the United States.
2. To serve as the central coordinating organization of medicine.
3. To serve as the representative of the medical profession in its relations with other health professions, industry, government, labor, consumers and other non-medical organizations.
4. To develop, stimulate and present scientific and professional programs and advances to the profession and public.
5. To continue its historic interest in all levels of medical education.
6. To assimilate recent medical graduates into the medical professional organizations.
7. To promote high standards of quality medical care.

AMA-ERF cites Macomb Auxiliary

The Woman's Auxiliary to the Macomb County Medical Society was one of six county auxiliaries in the nation to receive an Achievement Award from John M. Chenault, MD, AMA-ERF president and AMA trustee. The national Auxiliary presented a check for $550,927.01, the largest single contribution ever received for educational purposes by AMA-ERF. The money was gathered through a variety of projects conducted by national, state and county auxiliaries and through individual gifts.

Council discusses current concerns

The MSMS Council spent considerable time at its June meeting studying a special report of the MSMS Committee on Medical Socio-Economics regarding implications of any proposals for a uniform fee schedule for Medicaid patients.

A motion was adopted to establish a new Council policy that "in any negotiation with agents for Medicaid, the annual renegotiation of a schedule must be included."

During the discussion it was pointed out that the present House of Delegates policy is that any fee schedule must be negotiated on the basis of usual, customary and reasonable fees, and that any Medicaid uniform fee schedule would be contrary to that position.

The Council authorized a letter to Dale Kessler, MD, Grand Rapids, chairman of the committee, thanking the committee for its fine work.

Council members also reviewed pending legislation on the questions of hospital franchising, quality control, and construction. The Council voted to "support the principle of certificate-of-need legislation" and to continue to study the strengths and weaknesses of certificate-of-need legislation through an ad hoc committee which would meet with other interested organizations and report to the Council at its next meeting.

The May meeting of the Council acted on many different matters. E. Gordon Yudashkin, MD, director, Michigan Department of Mental Health, was a guest and reported on cuts in his program caused by Michigan's fiscal situation.

Members of the nominating committee for the MSMS Judicial Commission were named by the Council Chairman Ross V. Taylor, MD. The committee must report no later than September 1 with at least two nominations for each of the four positions that will be open.

The Council received a progress report from the MSMS Committee on Relative Value Study, which is meeting with the various specialties and will report to the MSMS House of Delegates.

Council members discussed the proposed Phase II Study which will ask members their views about MSMS operations.

Other committee minutes were acted upon.

Council actions in May and June on legislative matters have been reported in the yellow medigram newsletters.

Physician Assistant Grant awarded WMU

Western Michigan University has received a grant of $61,830 for the 1971-72 fiscal year which will enable plans for the Physician Assistants program to be completed. Russell H. Siebert, Vice President for Academic Affairs at WMU, has praised the MSMS Advisory Committee for contributing to the initial success at WMU with the proposal.

CAPSULES/Cont.

A scientific session entitled "Diabetic Emergencies: Diabetes Education" will be sponsored by Wayne State University School of Medicine at the Wayne County Medical Society Auditorium, Sept. 15. There is no registration fee and the conference is open to physicians, nurses, dietitians and Allied Health personnel.

Further information may be obtained from Miss Doris Bakker, Endocrinology and Metabolism Section, Wayne State University School of Medicine, 1400 Chrysler Expressway, Detroit 48207.

* * *

The First Michigan Allied Health Postgraduate Course in Diabetes will be held on Wednesday, November 3, and Thursday, November 4 at Sinai Hospital in Detroit. The course will be staffed by physicians, nurses, dietitians, a pharmacist and a social worker to cover the many aspects of diabetic self-care. Workshop sessions for nurses and dietitians are scheduled for the second afternoon. A dinner meeting on November 3 will be held at Northland Inn in Southfield.

For further information and complete program write to the Michigan Diabetes Association, 6131 West Outer Drive, Detroit 48235 or call (313) 342-9333. Please direct inquiries to Miss Barbara Lofquist, Regional Director.

* * *

Michigan doctors met June 9 to discuss the status of family planning at a conference at Michigan State University. Sheldon J. Segal, vice-president of the Population Council in New York City, was among the speakers at the day-long meeting which attracted medical and osteopathic physicians. Co-sponsored by the Michigan State Medical Society, the conference offered facts on Michigan family planning programs, the physician's role in family planning, contraceptive techniques, and attitudes toward the current abortion controversy.

* * *

Josef R. Smith, MD, Ann Arbor, is new president of the Michigan Thoracic Society. He succeeds Edward J. Klopp, Jr., MD, Battle

Capsules/Cont.

Creek. Doctor Smith is associate professor of internal medicine at the University of Michigan Medical School.

* * *

Included among six Albion College alumni who received "Distinguished Alumni Awards" in recognition of their achievements since graduation at the Annual Alumni Day dinner held in June was Stanley C. Penzotti, MD, Class of 1930. A past president of the St. Joseph Medical Society, Doctor Penzotti has also been a delegate to the Michigan State Medical Society for 10 years. Doctor Penzotti earned his medical degree at Northwestern University in 1935. In 1929 Doctor Penzotti was captain of Albion's first undefeated football team.

* * *

A recent forum held by the Oakland County Medical Society and the Michigan Arthritis Foundation featured Gilbert J. Galens, MD, or Birmingham and Myron M. LaBan, MD, PC, of Royal Oak.

The panel members at the free public forum presented current facts about arthritis treatment and answered questions from the audience concerning several aspects of the disease.

* * *

Most medical-oriented legislation has been put off for the fall session, probably in October and November. Likely to get attention in the fall are bills re the Physician's Assistant, bills to require hospitals to obtain a "Certificate of Need" for any kind of construction, bills to permit medical examiners to appoint lay designates, bills to establish a closed regulatory system for dangerous substances, and bills to require Blue Cross to contract with all licensed hospitals.

* * *

A centralized agency to plan and establish federal priorities for drug education and treatment was advocated recently by Maurice Seevers, MD, MSMS member and chairman of the U-M department of pharmacology, when he testified for the AMA before the House Subcommittee on Public Health and Environment.

Rep. Snyder receives first Macomb citation

Rep. Joseph M. Snyder, Democrat from St. Clair Shores, is the recipient of the first Macomb County Medical Society citation in recognition of his work in the health field.

Guests at the event included Bruce Ambrose, Manager, MSMS Department of Government Relations, who informed the audience about MDPAC and related activities.

Oscar D. Stryker, MD, made the award to Mr. Snyder. Thomas J. Setter, MD, Mount Clemens, was Legislative Committtee Chairman for the Macomb County society and handled all arrangements for the occasion.

In his address to the doctors, Representative Snyder stressed the legislative function in the medical society and emphasized the importance of participation in legislative actions. He encouraged all medical society members to attend their meetings more regularly and to vote on legislative issues.

Joel W. Clay, MD, reports that the newly established award helped to highlight the importance of support of those in public life both at the county and state levels for health measures.

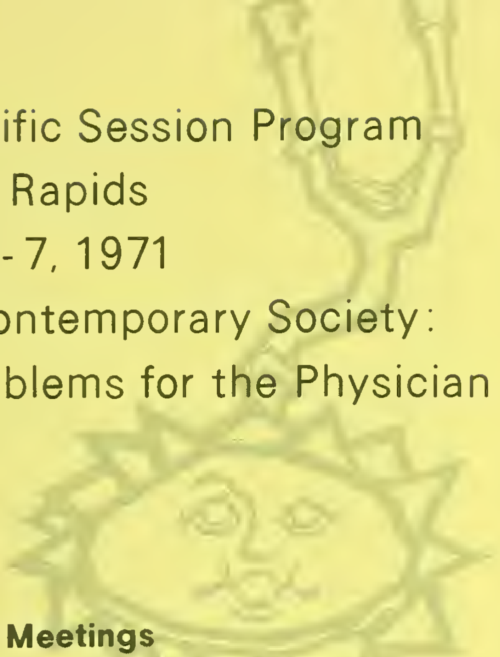
A series of recommendations to control mercury pollution of the environment have been announced by Rep. Joseph M. Snyder, (D-St. Clair Shores) chairman of the special House Committee investigating Great Lakes contamination problems. Representative Snyder hopes the recommendations and a detailed report will serve as the foundation for a comprehensive legislative program aimed at effective mercury contamination control. Representative Snyder pointed out that his committee did not involve itself with public health aspects of the mercury problem specifically relating to fishing. "This matter is currently being adjudicated by the courts," he stated. "Moreover, we did not have the background or facilities to establish specific mercury tolerances from the health standpoint." Besides its investigation of the mercury problem, the committee is studying the scope of effectiveness of regulations and programs to control Great Lakes contamination.

Urge members to return fee survey

Every MSMS member received a fee survey in July as the second research project of the new MSMS Bureau of Economic Information. The questionnaire had been reviewed and revised by the Specialty Section Chairmen.

Cooperation of every member is sought by Dale L. Kessler, MD, chairman, MSMS Medical Socio-Economics Committee.

Scientific Session Program
Grand Rapids
Oct. 6-7, 1971
Our Contemporary Society: Its Problems for the Physician



General Meetings
Wednesday, October 6

9-10:15 A.M.

A discussion to help you in your office in the TREATMENT OF DRUGS AND ALCOHOL ABUSE

Richard C. Bates, M.D., of Lansing is the Moderator and remarks will be made by psychiatrist Herbert A. Raskin, M.D., of Detroit and internist Donald A. Damstra, M.D., Phoenix

Of special interest to
General practitioners
Internists
Public health physicians
Psychiatrists

Panel presentation on the subject of THE CHANGING SPECTRA OF INFECTIONS by Moderator A. Martin Lerner, M.D., of Detroit and internists Frank Cox, Jr., M.D., and Francis Wilson, M.D., of Detroit.

Of special interest to
Internists
Surgeons
Pediatricians
General practitioners
Obstetricians and gynecologists

A meeting arranged to hear about TWENTY-FIVE YEARS OF EXPERIENCE WITH CHEMOTHERAPY IN RENAL TUBERCULOSIS by John K. Lattimer, M.D., of New York City

Time for a Business Meeting of the Section on Urology

Of special interest to
Urologists
Internists
General practitioners

11 A.M.-12:15 P.M.

THE ADOLESCENT AND HIS WORLD is a panel presentation moderated by Richard R. Galpin, M.D., of Royal Oak. The program is:

Community Relations – DRUG ABUSE AND RELATED PROBLEMS, Ralph R. Rabinovich, M.D., Northville

Medical Care – YOUTH AND HAZARDS OF AFFLUENCE, Martin G. Wolfish, M.D., Toronto, Ontario, Canada

School Derrek Miller, M.D., Ann Arbor

Of special interest to
Public health physicians
Internists
Pediatricians
General practitioners
Psychiatrists

A discussion on "U.T.I's" – "U THINK IT'S SIMPLE?" The Moderator is Arthur J. Johnson, M.D., of Detroit. The main speaker is to be announced. The discussant is James M. Colville, M.D., Detroit

Of special interest to
Urologists
Internists
General practitioners

12:15-1:45 P.M.

Lunchtime – see listing of Section meetings and related groups for luncheon-meetings

1:45-3 P.M.

The entire afternoon will be spent in a discussion of HEART ATTACK AND HEART DISEASE DEATHS, as follows:

Moderator: Carl B. Beeman, M.D., Grand Rapids
1:50 DIABETES AND A REVIEW OF TOLBUTAMIDE CONTROVERSY
Holbrooke S. Seltzer, M.D., Dallas
2:20 HYPERTENSION
Stevo Julius, M.D., Ann Arbor
2:40 SCREENING FOR CORONARY PRONE (Tecumseh Health Study)
Frederick H. Epstein, M.D., Ann Arbor
3:00 Coffee Time in the Exhibition Hall
3:45 OBESITY AND LIPIDS
Manuel Tzagournis, M.D., Columbus
4:15 SEDENTARY LIFE
Jack M. Kaufman, M.D., Huntington Woods
4:35 Questions and Answers
5:00 Business Meeting of the Section on General Practice

Of special interest to
Internists
General practitioners

1:45 - 3 P.M.

The same speakers and panelists will present two discussions, the first one on the subject of DIVERTICULITIS — MEDICAL OR SURGICAL?

Moderator: Eugene A. Gelzayd, M.D., Southfield

Panelists

Surgeon: Robert J. Freeark, M.D., Maywood, Illinois

Internist: Robert J. Priest, M.D., Detroit

Radiologist: William R. Eyler, M.D., Detroit

Time for questions and answers and a Business Meeting of the Section on Internal Medicine.

Of special interest to
Proctologists
Surgeons
Internists
General practitioners
Gastroenterologists
Radiologists
(See second presentation listed under 3:45 - 5 p.m.)

A talk by George H. Koepke, M.D., of Ann Arbor on THE CLINICAL AND LABORATORY APPRAISAL OF THE SILICONE GEL BELOW-THE-KNEE PROSTHESIS and a discussion on PROSTHESIS FOR BELOW-THE-ELBOW AMPUTEES — SOME SOCKET AND HARNESSING MODIFICATIONS by Leonard F. Bender, M.D., of Ann Arbor

Business Meeting of Section on Physical Medicine

Of special interest to
Section on Physical Medicine
All registrants are invited

ADVANCES IN DERMATOLOGIC MANAGEMENT by Richard K. Winkelmann, M.D., of Rochester, New York

Business Meeting of the Section on Dermatology

Of special interest to
Section on Dermatology
All registrants are invited

Mehdi Razavi, M.D. of the Cleveland Clinic will discuss CORONARY ARTERIOGRAPHY: ROENTGENOLOGICAL ASPECTS AND SURGICAL TREATMENT

Business Meeting of the Section on Radiology and the Michigan Radiological Society

Of special interest to
Section on Radiology
Michigan Radiological Society
All registrants are invited

(See listing of Section meetings for dinner details)

A talk by I. Leonard Bernstein, M.D., of Cincinnati on the subject of ENZYME DETERGENT SENSITIVITY

Of special interest to
Sections on Dermatology and
Occupational Medicine
All registrants are invited

3:45 - 5 P.M.

Continuation of HEART ATTACK AND HEART DISEASE DEATHS — program listed above

Second subject presented by the panel headed by Eugene A. Gelzayd, M.D., of Southfield on the subject of COLITIS — GRANULOMATOUS vs. ULCERATIVE: WHEN DOES IT CEASE TO BE MEDICAL AND BECOME SURGICAL?

Panelists

Surgeon: Robert J. Freeark, M.D., Maywood, Illinois

Internist: Robert J. Priest, M.D., Detroit

Radiologist: William R. Eyler, M.D., Detroit

Business Meeting of the Section on Gastroenterology

Of special interest to
Proctologists, surgeons, internists
General practitioners, pediatricians
Psychiatrists, radiologists
Gastroenterologists

Byron J. Bailey, M.D., of Galveston, Texas will talk on PARTIAL LARYNGECTOMY AND LARYNGOPLASTY

Reception and Business Meeting of the Section on Otolaryngology

Of special interest to
Section on Otolaryngology
All registrants are invited

Robert S. Jampel, M.D., of Detroit will talk on BRAIN STEM SYNDROMES OF OPHTHALMOLOGICAL IMPORTANCE

Business Meeting of the Section on Ophthalmology

Of special interest to
Section on Ophthalmology
All registrants are invited

5 P.M.

Adjournment of the Wednesday afternoon General Meetings. See listing of Sections and Related Groups for receptions, dinners and evening meetings.

General Meetings
Thursday, October 7

9 - 10:15 A.M.

THE SICKLE CELL SCENE will be presented under the co-sponsorship of the newly-founded International Sickle Cell Anemia Foundation. MOLECULAR DEFECT IN S.C.D. will be discussed by Makio Murayama, Ph.D., of the National Institutes of Health. Marion I. Barnhart, Ph.D., of Detroit will reveal CELL CHANGES DURING "CRISES" and Raymond L. Henry, Ph.D., Detroit, will present more data on RATIONALE OF R_x. Robert M. Nalbandian, M.D., of Grand Rapids will serve as moderator and will open the meeting with a review of EPIDEMIOLOGY OF S.C.D. AND MASS SCREENING. There will be time for questions and answers.

HOW DO WE ENVISION THE WORKING OF ABORTION AFTER THE LAW HAS BEEN PASSED? will be presented by Moderator R. Ralph Margulis, M.D., Royal Oak. Invited panelists are George E. LaCroix, M.D., and Ethelene E. Crockett, M.D., of Detroit. The subject of THE WORKING OF THE ABORTION LAW IN THE STATE OF NEW YORK will also be discussed. *This program will not be a rehash of the "legalized Abortion" topic!*

Business meeting of the Section on Obstetrics-Gynecology

Of special interest to
Obstetrician-gynecologists
Internists
General practitioners
Medicine and religion

11 A.M. - 12:15 P.M.

A Discussion by Cleveland Clinic's Donald B. Effler, M.D., and F. Mason Sones, Jr., M.D., on CARDIAC REVASCULARIZATION–FACT OR FANCY. This period will be moderated by Conrad R. Lam, M.D., Detroit

Of special interest to
Radiologists
Thoracic surgeons
Internists
General practitioners

A discussion on WHAT ARE "AUTO IMMUNE DISEASES"–IS ALL THAT GLITTERS GOLD? Thomas K. Burnham, M.D., of Detroit will present THE CLINICAL SIGNIFICANCE OF ANTINUCLEAR ANTIBODIES AND THE IMMUNOFLUORESCENT "BAND" TEST FOR LUPUS ERYTHEMATOSUS Howard Duncan, M.D., of Detroit is the Moderator and the discussants are Gerald A. LoGrippo, M.D. and Clarence E. Rupe, M.D., of Detroit

Of special interest to
Internists
Pediatricians
General practitioners
Allergists

12:15 - 1:45 P.M.

Lunchtime — see listing of Section meetings and related groups for luncheon-meetings

1:45 - 3 P.M.

STROKES IN 1971 — HORSE AND BUGGY OR JET SET, moderated by Raymond B. Bauer, M.D., of Detroit and discussed by neurologist William Hass, M.D., of New York City and Joseph N. Schaeffer, M.D., of Detroit (rehabilitation)

Business Meeting of the Section of Neurological Surgeons

(See listing of Section meetings for dinner details)

Of special interest to
Industrial physicians
Rehabilitative physicians
Public health physicians
Internists
General practitioners
Physical therapists
Neurologists
Neurological surgeons

THE EASY (?) IDENTIFICATION OF DIFFUSE INTRAVASCULAR CLOTTING AND PROPER TREATMENT will be moderated by John W. Moses, M.D., of Detroit

1:45 Eberhard F. Mammen, M.D., of Detroit will talk on THE BASIC PERTINENT SIMPLIFIED COAGULATION PHYSIOLOGY AND THE PATHOPHYSIOLOGY OF DISSEMINATED INTRAVASCULAR COAGULATION
2:15 Robert M. Nalbandian, M.D., of Grand Rapids will discuss ASPECTS OF DIAGNOSIS, SURVEILLANCE, AND THERAPEUTIC MANAGEMENT BY A SIMPLIFIED AND PROVEN TECHNIQUE
2:45 Questions and Answers

Of special interest to
Internists
Obstetrician-gynecologists
Surgeons

A talk by Donald B. Effler, M.D., of Cleveland entitled MY OBSERVATIONS OF SOCIALIZED MEDICINE IN HOLLAND, DENMARK, SWEDEN AND NORWAY

Of special interest to
Section on Thoracic Surgery
All registrants are invited

MINIMAL BRAIN DYSFUNCTION AND ADVANTAGES AND DISADVANTAGES OF DRUG TREATMENT will be presented by EDWARD F. RABE, M.D., Needham, Massachusetts. Chairman of the meeting is FRED A. BAUGHMAN, JR., M.D., of Grand Rapids

Business Meeting of the Section on Neurology

Of special interest to Section on Neurology
All registrants are invited

1:30 - 5 P.M.

The Section on Pathology and the Michigan Society of Pathologists has arranged a slide seminar on LESIONS OF THE OVARY by ARTHUR T. HERTIG, M.D., of Southboro, Massachusetts

Of special interest to Section on Pathology
All registrants are invited

3 - 3:45 P.M.

THE PILL AND BREASTS will be a panel discussion moderated by MICHAEL J. BRENNAN, M.D., of Detroit with panelist REUBEN L. KAHN, M.D., of Ann Arbor. A second member of the panel is being invited.

Of special interest to Obstetrician-gynecologists
Internists, General practitioners

FLUID AND ELECTROLYTE PROBLEMS IN CHILDREN (salicylate poisoning and problems with new diuretics) will be moderated by LAURENCE FLEISCHMANN, M.D., of Detroit

Panelists are: ROBERT W. WINTERS, M.D., of New York City who will discuss FLUID AND ELECTROLYTE THERAPY IN CHILDREN and ROBERT C. KELSCH, M.D., of Ann Arbor who will talk about THE USE AND HAZARDS OF THE NEWER DIURETICS IN CHILDREN

Questions and Answers

Business meeting of the Section on Pediatrics

Of special interest to Pediatricians
General practitioners

EDWARD BRUNNER, M.D., of Chicago will talk on ENZYME INDUCTION AND ITS CLINICAL IMPLICATIONS IN ANESTHETIC PRACTICE

Of special interest to
Section on Anesthesiology
Michigan Society of Anesthesiologists

TOTAL HIP REPLACEMENT—CONTRAINDICATIONS AND ALTERNATIVES by PAUL R. MEYER, M.D., of Chicago

5:15 Business Meeting of the Section on Orthopedic Surgery

(See listing of Section meetings for dinner details)

Of special interest to
Section on Orthopedic Surgery and the
Michigan Association of Orthopaedic Surgeons
All registrants are invited

5 P.M.

Adjournment of the Thursday afternoon General Meetings. See listing of Sections and Related Groups for receptions, dinners and evening meetings.

Meetings of Sections

Allergy and Applied Immunology

A joint meeting with the Section on Occupational Medicine has been scheduled for Wednesday, October 6, 12 noon luncheon-meeting. I. Leonard Bernstein, M.D., of Cincinnati will talk on "Enzyme Detergent Sensitivity" from 1:45 - 3 p.m. Both the luncheon and meeting will be in the Furniture Capitol Suite (Rooms 322-324) of the Pantlind.

Section Officers:

Chairman:	*Leonard L. DiLella, M.D., Detroit*
Vice Chairman:	*Rudolf E. Wilhelm, M.D., Dearborn*
Secretary:	*Peter P. Barlow, M.D., Birmingham*
Delegate:	*James A. McLean, M.D., Ann Arbor*
Alternate:	*John M. Lesesne, M.D., Grosse Pointe*

Anesthesiology

The Section will meet on Thursday, October 7, 3:45 to 5 p.m. in Meeting Room C of the Civic Auditorium. Edward Brunner, M.D., Chicago, will talk on "Enzyme Induction and Its Clinical Implications in Anesthetic Practice."

Section Officers:

Chairman:	*Thomas J. DeKornfeld, M.D., Ann Arbor*
Vice Chairman:	*Paul J. Fatum, M.D., Grand Rapids*
Secretary:	*Ralph E. Bauer, M.D., Detroit*
Delegate:	*Bernard J. Sivak, M.D., Southfield*
Alternate:	*John D. Snider, M.D., Grand Rapids*

Dermatology

The Section will meet on Wednesday, October 6, 1:45 to 3 p.m. in Meeting Room D of the Civic Auditorium. "Advances in Dermatologic Management" will be presented by Richard K. Winkelmann, M.D., of Rochester, New York.

Section Officers:

Chairman:	*Russell G. Graff, M.D., Grand Rapids*
Secretary:	*Jules Altman, M.D., Detroit*

MEDIGRAMS
ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
SEP 14 1971

Michigan Medicine
August 16, 1971, Volume 70, Number 20
Michigan State Medical Society
Reading Time: 2 Mins. 45 Seconds

SMS HAS ASKED the Michigan Insurance Bureau to call a conference on the situation which makes it impossible for some doctors of medicine to obain professional liability insurance coverage." MSMS is receiving an ncreasing number of complaints from young physicians and those coming ut of military service who wish to establish practices in Michigan that hey are unable to purchase coverage except from Lloyd's of London. MSMS as been notified that Medical Protective Company, Fort Wayne, Ind., will ot accept any new applicants in Wayne, Oakland and Genesee, nor will it ccept an applicant from any of the other 80 counties unless he is joining professional corporation or partnership containing physicians already nsured by the firm. Several other firms will not write any new clients nd often will not renew those already insured.

OVER 2,000 MSMS MEMBERS returned the Survey on Physicians' Fees. If you haven't, please do so. Additional copies can be obtained by writing MSMS Bureau of Economic Information, Box 950, East Lansing 48823.

HE LEGISLATIVE STUDY COMMITTEE ON MALPRACTICE will be chaired by Sen. . Harvey Lodge (Waterford), chairman of the Senate Commerce Committee hich routinely handles all insurance legislation. Rep. J. Robert raxler (Bay City), chairman of the House of Representatives Judiciary ommittee, is vice chairman. The committee met July 29 to organize and egin work in appointment of a 15-member citizen advisory committee. ther members of the legislative committee are Senators Robert VanderLaan Grand Rapids), Alvin DeGrow (Pigeon), Daniel Cooper (Oak Park), Arthur artwright (Detroit), and Patrick McCollough (Dearborn), and Reps. Matthew cNeely (Detroit), Raymond Hood (Detroit), John Kelsey (Warren), George rescott (Tawas City), and Melvin DeStigter (Hudsonville).

THE FEDERAL BUREAU of Narcotics and Dangerous Drugs has extended its July 29 deadline for use of physician registration numbers under the Controlled Substances Act to October 1. Bureau says personnel shortages have made it impossible to process all applications. Bureau previously extended a May 1 deadline to July 29. See article "RX Legislation Deadline Extended," page 3, May 10 issue of "American Medical News" for details.

THE SICKLE CELL SCENE will be presented at the 106th MSMS Scientific Session, October 6-7. Participants are Makio Murayama, PhD, the research bio-chemist who first advanced the molecular theory on the mechanism of sickling, and Robert M. Nalbandian, MD, associate pathologist, Blodgett Memorial Hospital, who has worked with Dr. Murayama for almost a decade. These and other speakers Marion Barnhart, PhD, and Raymond L. Henry, PhD, will describe the proper use of intravenous urea-sugar solutions to reverse the sickling process. Mass screening techniques, including the dithionite test which is easily adaptable to existing equipment in many hospitals, will also be described. SCD is the first genetic disease to be reversed at the molecular level, and could well serve as a model. MSMS Annual Scientific Session Program appears in the August issue of Michigan Medicine. Tear out program pages for easy reference.

THE IRS HAS ADVISED MSMS as follows in response to an MSMS inquiry whether physicians are required to supply tax identifying numbers to insurance companies:

"The payers of medical and health care fees are required to file Forms 1099-MED and 1096 annually with Internal Revenue Service. In general, payers are insurance companies, Blue Cross and Blue Shield organizations, Federal and State agencies participating in the Medicare and Medicaid programs, and unions and employers having self-insured or self-administered health care plans.

Section 2, Revenue Ruling 69-595 reads: Persons making payments of fees aggregating $600 or more during any calendar year in the course of their trade or business under plans, programs, or policies of insurance or medical assistance to doctors or other suppliers of medical health care services, are required to file Forms 1099 (revised as 1099-MED for this purpose) and 1096 with respect to such payments made directly to doctors and other suppliers. However, under the authority of Section 7805(b) of the Code, except for payments made under Medicare and Medicaid programs, the provisions of Revenue Ruling 69-595 will not be applied with respect to payments made prior to January 1, 1971."

MEDICAL SCHOOLS WILL BE ENLARGED again this fall if Substitute SB 928 is passed in the Michigan House of Representatives. Substitute SB 928 would provide funds to train 1,707 medical students at the three medical schools and an additional 81 osteopathic students. Of the 1,788 medical students 552 will be entering freshmen, an increase of 97 over a year ago. The 552 represents a gain of 176 over 5 years ago.

Enrollment figures under the Senate-approved bill provide for 208 freshmen and a total student body of 644 at WSU; 225 freshmen and a total of 87 at U-M; and 83 freshmen and a total of 188 at MSU. The MSU osteopathic school would enroll 36, and have a total of 81.

It is possible that 16 or more medical students would be covered in a proposed $216,000 for Medical Augmentation Grants Improving Care, which would reimburse schools $13,500 per student accepted above the legislated figures.

NEXT MEETING OF THE MSMS COUNCIL will be September 15. The tentatively scheduled August 25 meeting has been cancelled and the September session called instead.

A PROPOSAL THAT MSMS prepare articles of incorporation toward the formati of a foundation was reviewed by the MSMS Council July 31 and The Council instructed the study committee to complete its work for further review at the September Council meeting. It is proposed that the foundation contra to provide peer review for governmental agencies and insurance carriers.

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.
© 1971 Michigan State Medical Society.
Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

Second Class Postage Paid at East Lansing, Mich.
and at additional mailing offices.

UNIVERSITY OF CAL
LIBRARY SCH OF MED
THIRD & PARNASSUS AVE
SAN FRANCISCO CAL 94122

MEDIGRAMS
LATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
SEP 9 1971

Michigan Medicine

August 26, 1971, Volume 70, Number 21
Michigan State Medical Society
Reading Time: 2 Mins. 5 Seconds

IN RESPONSE TO AN MSMS REQUEST, State Insurance Commissioner Russel E. Van Hooser has reported he will call a conference of concerned parties about professional liability insurance for physicians. MSMS also asked for "an immediate investigation of the situation" and Commissioner Van Hooser has told MSMS Council Chairman Ross V. Taylor, MD, that "the bureau staff is presently analyzing reports requested from over 300 companies authorized to write such coverage."

"Maintaining an insurance market for this coverage has been a continuing problem not only in Michigan, but also nationwide," Mr. Van Hooser reports.

Doctor Taylor's letter to the state agency explained that "MSMS is receiving an increasing number of complaints from physicians who cannot purchase insurance coverage except possibly from Lloyd's . . . many complainants are young physicians, or those coming out of military service who desire to establish their practices in Michigan."

NEWSPAPERS AND MAGAZINES have been having a field day saying that the American Medical Association is losing membership. The facts are: as of June 30, 1971, the total AMA membership is 216,361. As of June 30, 1970, which is a comparable date, the total membership in the AMA was 209,422.

STATE BOARD OF EDUCATION, after receiving a recommendation from its staff to approve the Western Michigan University proposed physician assistant degree program, voted not to approve. (And not to disapprove either.) WMU President James W. Miller issued a statement that WMU had filed its plans a year ago, that initial funding had been granted by HEW, that Governor Milliken had endorsed the proposal, and that "Western intends to proceed with its program to prepare physicians' assistants."

PAYMENTS TO PHYSICIANS under Part B of Medicare will be based on actual 1970 charges, rather than 1969 charge data as before, the Social Security Administration has announced. The change was effective July 1. Payments continue at the 75th percentile.

MSMS WAS REPRESENTED at the AMA Conference on Health-Quackery-Chiropractic in Chicago, August 6 by several MSMS committee members and staff.

OUR CONTEMPORARY SOCIETY offers affluence and convenience, but it also poses PROBLEMS FOR THE PHYSICIAN . . . that is the theme of the Scientific Session to be held in Grand Rapids, October 6-7.

The Adolescent and His World segment will examine "Drug Abuse and Related Problems," and "Delivery of Medical Care to Adolescents," and "Physical and Emotional Development in Adolescence and the High School System" ... a Wednesday morning presentation is slated on Treatment of Drugs and Alcohol Abuse ... an evening session of the Section on Psychiatry will consider The History and Future of Human Violence and Aggression.

A pre-convention brochure will be mailed to you in early September.

AVERAGE LENGTH OF STAY varies in the nation from 6.6 days in the West to 8.4 days in the East, according to study completed by Commission on Professional and Hospital Activities in Ann Arbor. Average in Central States was 7.8 days.

MORE THAN $1 MILLION in loans will be awarded in 1971-72 school year by 10 Michigan colleges and universities to students in medicine, osteopathy, dentistry, veterinary medicine, pharmacy, optometry and podiatry from the Health Professions Educational Assistance Act of 1968. An additional $615,592 will be issued to Michigan students as scholarships under HEW guidelines.

THE AMA SUPPORTED health care proposals in 31 of 35 appearances before Congressional Committee, testifying for medical school expansion, increased financial aid to medical students, family practice training programs, and full funding for maternal and child care programs. The AMA filed its "scorecard" in response to Senator Kennedy's charges that the AMA maintains a negative, obstructionist attitude toward health care proposals.

RALPH NADER HAS announced the formation of a nationwide team of doctors to monitor the performance of physicians and hospitals as to both fees and professional competence.

MSMS ARRANGED A CONFERENCE August 24 between representatives of the Detroit Free Press and the medical profession to provide new information about the AMA and to answer questions. Donald N. Sweeny, Jr., MD, chairman of the MSMS delegation to the AMA House of Delegates, set the stage by indicating that MSMS and the AMA are not questioning the Free Press right to be critic of the medical profession, but that doctors hope the Free Press will be fai and report positive efforts of doctors and the AMA to help resolve health care problems. Doctor Sweeny cautioned that news media occasionally resort to out-dated cliches about the AMA that may also be inaccurate and misleadi

AS OF AUGUST more than 3000 physicians are participating in the California Medical Association's certification program for continuing medical education. The voluntary program entered its second year on July 1.

INFORMATION ABOUT MEDICO opportunities in Indonesia and Afghanistan is available for interested MSMS members. Write Nelson Taylor, MD, 722 Notre Dame Avenue, Grosse Pointe, Mi 48230.

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1971 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

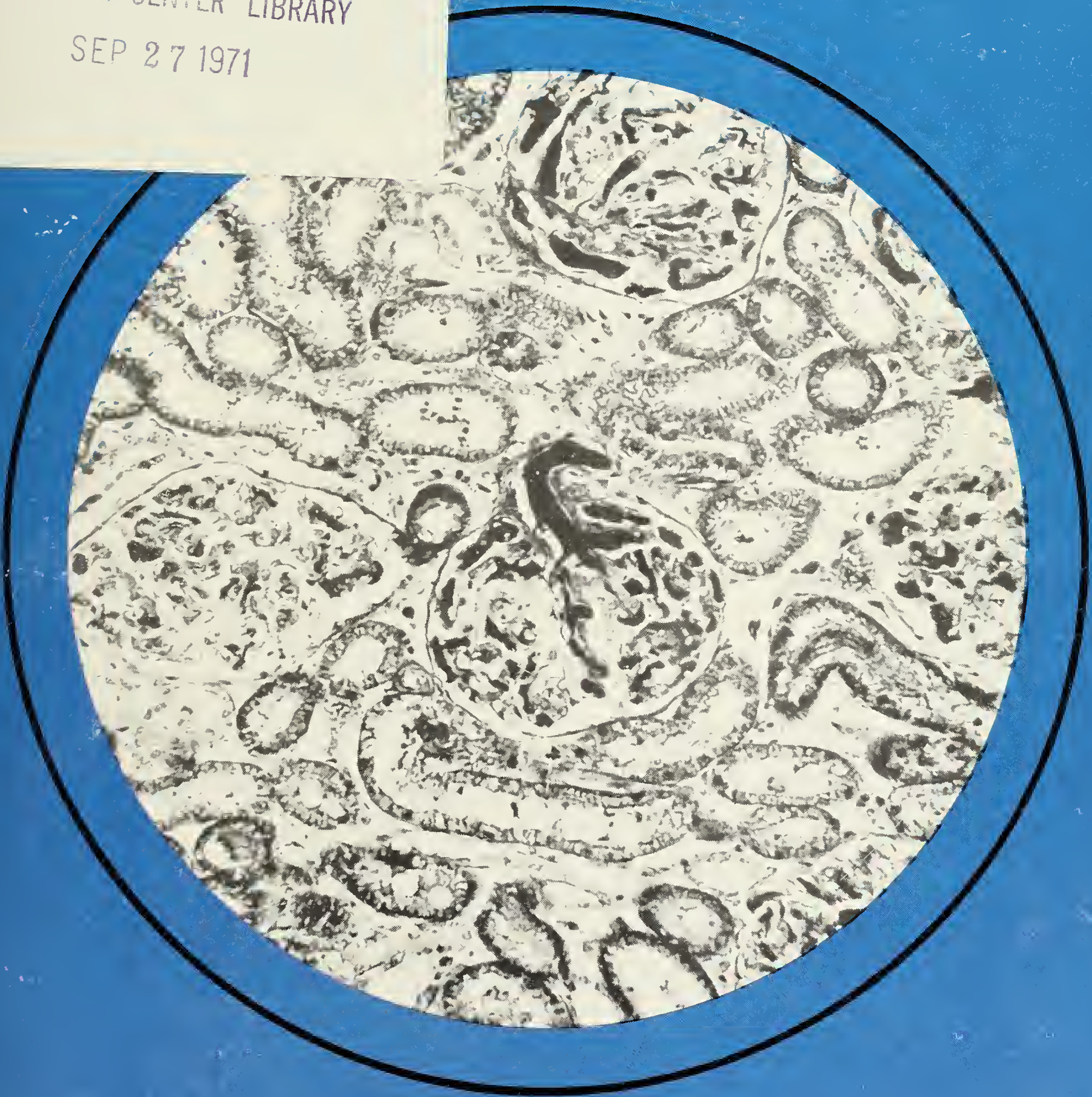
Second Class Postage Paid at East Lansing, Mich.
and at additional mailing offices.

UNIVERSITY OF CAL
LIBRARY SCH OF MED
THIRD & PARNASSUS AVE
SAN FRANCISCO CAL 94122

SEE PAGES 846 & 868 FOR ANNUAL SESSION INFORMATION

Michigan Medicine

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
SEP 27 1971



CONSUMPTION COAGULOPATHY, PAGE 793

Patients fell asleep quickly

Dalmane (flurazepam HCl) 30 mg reduced awake time—both before and after falling asleep - by fifty percent of pretreatment values in patients with insomnia.[1,2]

Two sleep laboratory studies recently confirmed findings of earlier studies of this type, namely, that Dalmane 30 mg was effective in patients who had trouble falling asleep, staying asleep or both. One 30-mg capsule of Dalmane usually induced sleep within 22 minutes, decreased the number of awakenings and the wake time after the onset of sleep, and provided 7 to 8 hours of sleep without need to repeat dosage during the night.

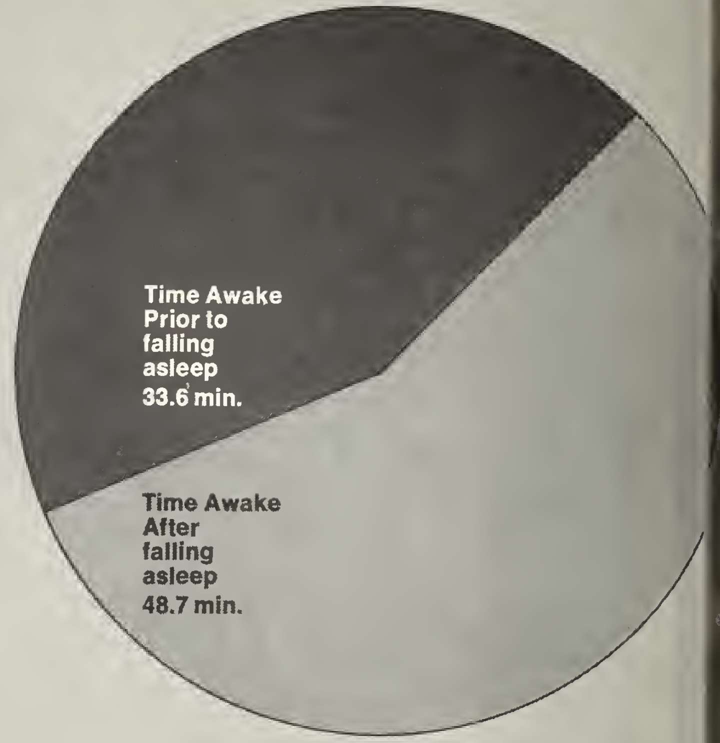
These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electroencephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hangover" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

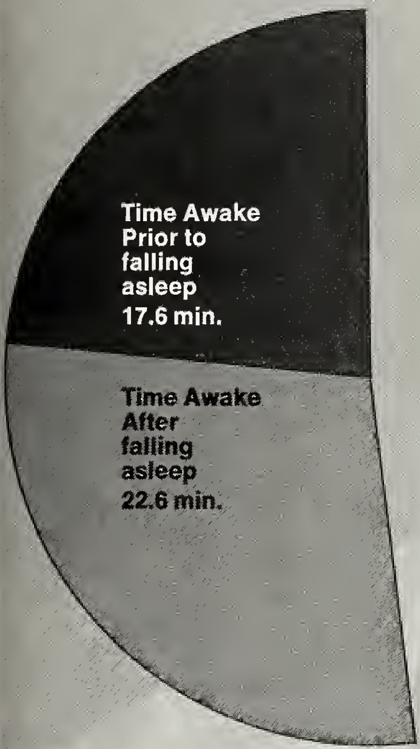
Before
Dalmane
(flurazepam HCl)



Measurements of sleep in the sleep laboratory are obtained with electroencephalographic, electro-oculographic and electromyographic recordings.

ınd slept through the night

On
Dalmane
(flurazepam HCl)



rage sleep laboratory measurements in cited studies

ameter	Before Dalmane	On Dalmane
e required to fall asleep	33.6 min.	17.6 min.
e time after onset of sleep	48.7 min.	22.6 min.
nber of wakeful periods after nset of sleep	12.2	8.4
l sleep time	420.0 min.	447.5 min.
l sleep percent	88.6	94.5

inical effectiveness as
oven in the sleep laboratory

Dalmane®
urazepam HCl)

30-mg capsule h.s.—usual adult dosage.
15-mg capsule h.s.—initial dosage for
erly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

You know
diuretics
medically.

Short-acting diuretics may create abrupt,
inconvenient waves of diuresis.
Long-acting Hygroton offers a gentle flow
rather than abrupt diuresis.
It's smooth acting.
In edema and hypertension.

Hygroton® chlorthalidone USP

Makes water, not waves.

But
have you
met them
socially?
LADIES

Electrolyte imbalance may occur when using diuretics. Hygroton is contraindicated in severe renal or hepatic diseases and, of course, if it causes hypersensitivity. Carefully supervise those who may be receiving other antihypertensives.

Hygroton® chlorthalidone USP *Indications:* Hypertension and many types of edema involving retention of salt and water. *Contraindications:* Hypersensitivity and most cases of severe renal or hepatic diseases. *Warnings:* With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Use with caution in pregnant women and nursing mothers since the drug crosses the placental barrier and appears in cord blood and since thiazides appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus. *Precautions:* Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. *Adverse Reactions:* Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization. *Average Dosage:* 50 or 100 mg. with breakfast daily or 100 mg. every other day. *How Supplied:* White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000. (B)46-230-G *For full details, please see the complete prescribing information.*

GEIGY Pharmaceuticals, Division of CIBA-GEIGY Corporation, Ardsley, New York 10502

HY-7764-9

Michigan Medicine

IN THIS ISSUE

SCIENTIFIC ARTICLES

793 Consumption Coagulopathy: Practical Principles of Diagnosis and Management; Robert M. Nalbandian, MD; Raymond L. Henry, PhD; Eberhard F. Mammen, MD; Dale L. Kessler, MD; Paul L. Wolf, MD; LTC Frank R. Camp, Jr., MSC, USA; Col. Nicholas F. Conte, MC, USA
805 Treatment of Parkinsonism with Levo-dopa: Results in 302 Cases; Tracy A. Newkirk, MD; Kenneth R. Magee, MD
815 Halothane, Methoxyflurane and Hepatic Necrosis; Jay M. McDonald, MD; Song H. Nam, MD; A. R. W. Climie, MD

SPECIAL ARTICLES

812 Muskegon, 3 WSU Students Enter into Contract; Other Cities Interested; Deanna Popoff
813 Rich GR Medical History Began in 1835; Sue Ludwig
831 SSA Penny-Wise, Pound-Foolish About Home Health Service; Sidney E. Chapin, MD
846 Technical and Scientific Exhibitors to Annual Session
868 Speakers to Discuss Contemporary Society and Physician—Annual Session, Oct. 6-7

OTHER FEATURES

784 President's Page
788 MSMS Leadership
825 Your Opinion Please
835 Michigan Mediscene
849 About Doctors
852 In Memoriam
876 Delegates and Alternates
881 Breaking News

The cover photo depicts the lesion afflicting patients with disseminated intravascular coagulation, the subject for the lead scientific article in this issue. The subject will also be discussed by the same authors at the MSMS Scientific Session in October. The cover design is the work of Robert Brent, a publications designer for Michigan State University.

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published Semi-Monthly, Trimonthly in January and December; 26 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351. © 1971 Michigan State Medical Society.

SCIENTIFIC EDITOR
John W. Moses, MD

EXECUTIVE EDITOR
Herbert A. Auer

MANAGING EDITOR
Judith Marr

PUBLICATION COMMITTEE
Robert M. Leitch, MD
Battle Creek
Chairman

Donato F. Sarapo, MD
Adrian

Edward J. Tallant, MD
Detroit

INFORMATION FOR CONTRIBUTORS

1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size ($8\frac{1}{2}$ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.

2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.

3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by Michigan Medicine.

4. Articles should ordinarily be less than four printed pages in length (3000 words).

5. References should conform to *Cumulative Index Medicus*, including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.

6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. New items and notes are welcome.

7. It is understood that material is submitted for exclusive publication in Michigan Medicine.

President's Page

Hoping to See Many of You in Grand Rapids

H. H. Hiscock, M.D.
MSMS President

Our MSMS leaders are hopeful that more physicians than ever will participate in the 106th Annual Scientific Session in Grand Rapids, October 6-7.

The "Necessity of Postgraduate Study" was the subject for one of the resolutions adopted by the 1970 MSMS House of Delegates, and the phrases fit nicely into my message to you this month.

The adopted MSMS resolution declared that there are two major reasons for a greater dedication to continuing medical education:

". . . the practice of medicine is a constantly changing and evolving profession requiring life-long study . . . "

". . . constant study is necessary to provide the highest quality of medical care possible . . . "

Certainly, we recognize that postgraduate medical education is a vital necessity for each physician. It is not only an obligation, but an extremely interesting privilege. Every good physician has a sincere desire to keep up so he can continue to meet faithfully his obligations. Every physician does read medical journals, does attend postgraduate courses at medical schools, does participate in his specialty conferences—and more physicians should participate each year in the Annual Scientific Session of MSMS.

I am impressed with the quality of speakers obtained for the 1971 Annual Session in Grand Rapids, and with the timely aspects of the subjects that have been chosen.

Just for example, the program on Wednesday, October 6 will offer the chance to find out what's new in the "Treatment of Drugs and Alcohol Abuse" or to learn about "Twenty Five Years of Experience with Chemotherapy in Renal Tuberculosis." The physician can discuss the "Heart Attack and Heart Disease Deaths" and he can ask questions about "Diverticulitis—Medical or Surgical?" The doctor can find out the latest in "Advances in Dermatologic Management" or "Enzyme Detergent Sensitivity." Many other subjects are slated for Wednesday.

Physicians who cannot attend both days can come on Thursday, October 7 to learn more about "The Sickle Cell Scene." Many will be interested in a first-hand report about "Observations of Socialized Medicine in Holland, Denmark, Sweden and Norway." Timely topics include "The Pill and Breasts," "Cardiac Revascularization—Fact or Fancy?" Many other topics are listed for Thursday.

Once again, the MSMS Annual Scientific Session is offered to all MSMS members, residents, interns, and medical students at no charge. This is one of the many membership services provided by MSMS.

The 1970 MSMS resolution also included a sentence—that helps provide a strong ending for this editorial. MSMS delegates took action to "endorse the principle of voluntary life-long postgraduate study for all physicians . . . "

Please make that extra effort and do participate in the really fine 1971 Annual Scientific Session in Grand Rapids, Wednesday and Thursday, October 6-7.

IN ASTHMA
IN EMPHYSEMA

optional therapy

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula
First choice

MUDRANE-2
When ephedrine is too exciting or is contraindicated

MUDRANE GG
During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2
A counterpart for Mudrane-2

MUDRANE GG ELIXIR
For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217
Manufacturers of Ethical Pharmaceuticals

THE NIGHT SHIFT OF DEPRESSION...

Depression is a 24-hour-a-day problem... and disturbed sleep is often its nocturnal expression. In fact, such disturbance may be a key symptom in establishing the diagnosis of depression.

WHEN THE DIAGNOSIS IS DEPRESSION

ELAVIL® HCl

(AMITRIPTYLINE HCl | MSD)

TABLETS: 10 mg, 25 mg, and 50 mg
INJECTION: 10 mg/cc

When depression is serious enough to warrant medication, ELAVIL HCl may prove extremely helpful. Unlike psychic energizers or agents that merely elevate mood, ELAVIL HCl embodies a mild antianxiety action which manifests itself even before the fundamental antidepressant activity of the drug becomes evident. Daytime drowsiness occurs in some patients, usually within the first few days of therapy.

NOTE: Not recommended during the acute recovery phase following myocardial infarction. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible. Should not be given to patients who have received an MAOI within two weeks.

Contraindications: Known hypersensitivity. Should not be given concomitantly with or within at least 14 days following the discontinuance of a monoamine oxidase inhibitor. Then initiate dosage of amitriptyline HCl cautiously with gradual increase in dosage until optimum response is achieved. Not recommended during the acute recovery phase following myocardial infarction or for patients under 12 years of age.
Warnings: May block the antihypertensive action of guanethidine or similarly acting compounds. Should be used with caution in patients with a history of seizures or urinary retention, or with narrow-angle glaucoma or increased intraocular pressure. Patients with cardiovascular disorders should be watched closely; arrhythmias, sinus tachycardia, and prolongation of the conduction time have been reported, particularly with high doses; myocardial infarction and stroke have been reported with drugs of this class. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. May impair mental and/or physical abilities required for performance of hazardous tasks, such as operating machinery or driving a motor vehicle. Safe use during pregnancy and lactation has not been established; in pregnant patients, nursing mothers, or women who may become pregnant, weigh possible benefits against possible hazards to mother and child.
Precautions: When used to treat the depressive component of schizophrenia, psychotic symptoms may be aggravated; in manic-depressive psychosis, depressed patients may experience a shift toward the manic phase, and paranoid delusions, with or without associated hostility, may be exaggerated; in any of these circumstances, it may be advisable to reduce the dose of amitriptyline HCl, or to use a major tranquilizing drug, such as perphenazine, concurrently.
When given with anticholinergic agents or sympathomimetic drugs, close supervision and careful adjustment of dosages are required. May enhance the response to alcohol and the effects of barbiturates and other CNS depressants. The possibility of suicide in depressed patients remains during treatment and until significant remission occurs; this type of patient should not have easy access to large quantities of the drug. Concurrent electroshock therapy may increase the hazards of therapy; such treatment should be limited to patients for whom it is essential. Discontinue the drug several days before elective surgery if possible.
Adverse Reactions: *Note:* Included in this listing are a few adverse reactions not reported with this specific drug. However, pharmacological similarities among the tricyclic antidepressant drugs require that each reaction be considered when amitriptyline is administered.
Cardiovascular: Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms. *Anticholinergic:* Dry mouth, blurred vision, disturbance of accommodation, constipation, paralytic ileus, urinary retention, dilatation of urinary tract. *Allergic:* Skin rash, urticaria, photosensitization, edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. *Gastrointestinal:* Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, parotid swelling. *Endocrine:* Testicular swelling and gynecomastia in the male, breast enlargement and galactorrhea in the female, increased or decreased libido. *Other:* Dizziness, weakness, fatigue, headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, drowsiness, jaundice. *Withdrawal Symptoms:* Abrupt cessation of treatment after prolonged administration may produce nausea, headache, and malaise; these are not indicative of addiction.
How Supplied: Tablets containing 10 mg and 25 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100, 1000, and 5000; tablets containing 50 mg amitriptyline HCl, in single-unit packages of 100 and bottles of 100 and 1000; for intramuscular use, in 10-cc vials containing per cc: 10 mg amitriptyline HCl, 44 mg dextrose, and 1.5 mg methylparaben and 0.2 mg propylparaben as preservatives.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

MSMS Leadership

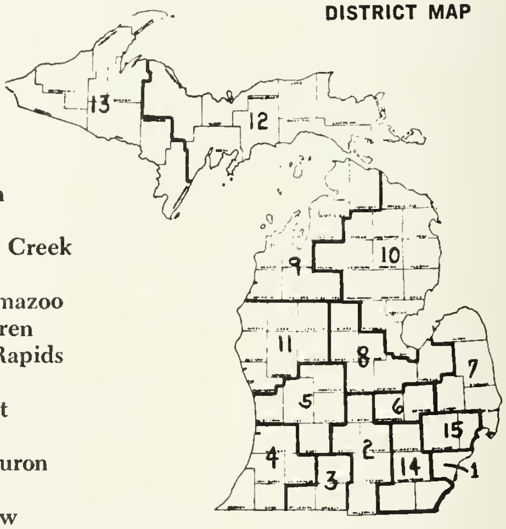
PRESIDENT: Harold H. Hiscock, MD, Flint
PRESIDENT-ELECT: Sidney Adler, MD, Detroit
SECRETARY: Kenneth H. Johnson, MD, Lansing
ASST. SECRETARY: Brooker L. Masters, MD, Fremont
TREASURER: John R. Ylvisaker, MD, Pontiac
ASST. TREASURER: C. Allen Payne, MD, Grand Rapids
SPEAKER: Vernon V. Bass, MD, Saginaw
VICE-SPEAKER: James D. Fryfogle, MD, Detroit
PAST PRESIDENT: Robert J. Mason, MD, Birmingham

COUNCIL CHAIRMAN: Ross V. Taylor, MD, Jackson
VICE-CHAIRMAN: Brooker L. Masters, MD, Fremont
DIRECTOR: Warren F. Tryloff, East Lansing
GENERAL COUNSEL: Lester P. Dodd, Detroit
LEGAL COUNSEL: A. Stewart Kerr, Detroit
SCIENTIFIC EDITOR: John W. Moses, MD, Detroit
ECON. CONSULTANT: Clyde T. Hardwick, Houghton
HISTORIAN: Wm. J. Stapleton, Jr., MD, Detroit
ASST. HISTORIAN: Wm. M. LeFevre, MD, Muskegon

AMA DELEGATES
Otto K. Engelke, MD, Ann Arbor
John R. Heidenreich, MD, Daggett
Luther R. Leader, MD, Royal Oak
Robert E. Rice, MD, Greenville
John J. Coury, MD, Port Huron
George W. Slagle, MD, Battle Creek
Donald N. Sweeny, Jr., MD, Detroit (Chairman)
Joseph A. Witter, MD, Rochester

ALTERNATES
John W. Moses, MD, Detroit
Paul T. Lahti, MD, Royal Oak
Harold A. Furlong, MD, Pontiac
Bradley M. Harris, MD, Ypsilanti
James C. Danforth, Jr., MD, Detroit
Marjorie Peebles Meyers, MD, Detroit
Robert C. Prophater, MD, Bay City
Vernon V. Bass, MD, Saginaw

COUNCILOR DISTRICT MAP



First District Councilors: (Wayne County)
Edward J. Tallant, MD, Detroit
Ralph R. Cooper, MD, Detroit
Frank G. Bicknell, MD, Detroit
Milton R. Weed, MD, Grosse Pointe Park
Brock E. Brush, MD, Detroit
Second District Councilor: Ross V. Taylor, MD, Jackson
Counties: Clinton, Eaton, Hillsdale, Ingham, Jackson
Third District Councilor: Robert M. Leitch, MD, Battle Creek
Counties: Branch, Calhoun, St. Joseph
Fourth District Councilor: W. Kaye Locklin, MD, Kalamazoo
Counties: Allegan, Berrien, Cass, Kalamazoo, Van Buren
Fifth District Councilor: Noyes L. Avery, MD, Grand Rapids
Counties: Barry, Ionia-Montcalm, Kent, Ottawa
Sixth District Councilor: Ernest P. Griffin, Jr., MD, Flint
Counties: Genesee, Shiawassee
Seventh District Councilor: John J. Coury, MD, Port Huron
Counties: Huron, Sanilac, Lapeer, St. Clair
Eighth District Councilor: A. Carl Stander, MD, Saginaw
Counties: Gratiot-Isabella-Clare, Midland, Saginaw, Tuscola
Ninth District Councilor: Adam C. McClay, MD, Traverse City
Counties: Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet combined), Wexford-Missaukee
Tenth District Councilor: Robert C. Prophater, MD, Bay City
Counties: Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties, (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined)
Eleventh District Councilor: Brooker L. Masters, MD, Fremont
Counties: Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana
Twelfth District Councilor: William A. LeMire, Sr., MD, Escanaba
Counties: Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger
Thirteenth District Councilor: Donald T. Anderson, MD, Wakefield
Counties: Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon
Fourteenth District Councilor: Donato F. Sarapo, MD, Adrian
Counties: Lenawee, Livingston, Monroe, Washtenaw
Fifteenth District Councilor: Sydney Scher, MD, Mount Clemens
Counties: Macomb, Oakland

Robert M. Leitch, MD

Urge Effective Communication

By Robert M. Leitch, MD, Chairman
MSMS Publication Committee

The importance of effective communications between the leaders and the members of medical societies certainly is discussed every day—and recently was viewed by two component society editors.

An appeal for help in communicating component society concerns was voiced recently by Edward J. Tallant, MD, editor of the *Detroit Medical News,* and a member of the MSMS Council. He listed various problems.

And then, J. V. Fopeano, MD, suggested some other angles in an article in the bulletin of the Kalamazoo Academy of Medicine. Doctor Fopeano is their editor.

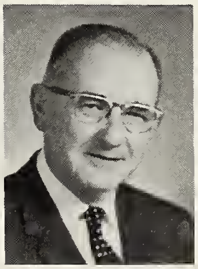
In his editorial, Doctor Tallant asked, "Members, how can we get your attention? Only a small handful are actually knowledgeable. All should be! Please tell us how we, as your county society officers can better communicate?"

Doctor Fopeano agrees when he writes, "No doubt many editors and officers share his (Doctor Tallant's) disquietude."

Doctor Tallant wrote his piece after participating in a hospital staff discussion about socio-economic issues when he found himself "at a loss to understand the lack of knowledge by the members of the staff concerning rather fundamental problems which have been discussed and rediscussed in the *Detroit Medical News.*" He observed that there was not one question asked, not one argument proposed which had not been discussed previously in the Wayne County Medical Society weekly journal.

In his article, Doctor Tallant talked about the various specialty organizations that are becoming more active. He observed in part, "Each of these groups is honest, sincere, and well-meaning; and each hasn't the vaguest idea what the other is doing." He made the strong appeal that, "We must speak as one voice in our dealings with third parties, be it Federal Government, Blue Shield, or what have you."

Tallant



Fopeano

As a member of the WCMS Council, Doctor Tallant expressed the concerns of his fellow-leaders, in discussing the "appalling lack of awareness of the actual activities of the Wayne County Medical Society."

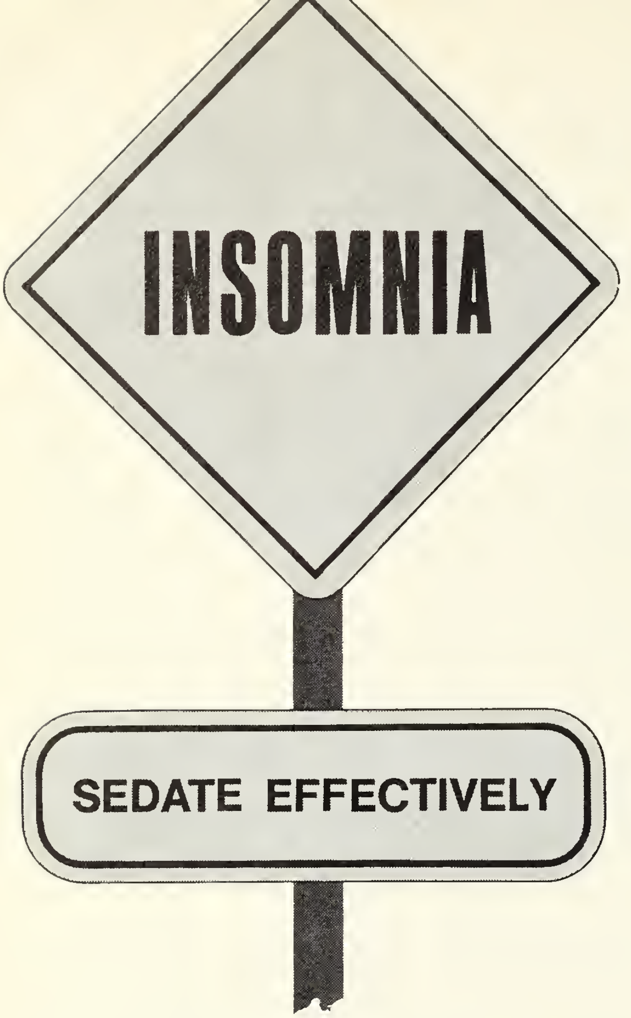
"There is still only a small percentage of the membership which is active in the Society. It is your hide the social planners wish to nail to the wall," Doctor Tallant wrote.

(Interested MSMS members may read the full article by Doctor Tallant in the April 26 issue of the *Detroit Medical News.*)

In the follow-up editorial by Doctor Fopeano in the Kalamazoo bulletin, he suggested that "There certainly can be no simple answers" to these communications questions and added that "Some partial answers may have to suffice." Doctor Fopeano then proposed six ways in which adjustments could be made to improve communications. In part, he suggested:

"1. Adjust expectations to the capacity of members to react. It is unreasonable to expect a doctor who is being harassed to see more patients, deliver and document better service, continue his education, care for his family and his own mental and physical health . . . , it is unreasonable to expect him to be conversant with much of the proposed legislation or even a great deal of the activity of many of the committees of a large medical society. Only a small fraction from each special interest group should be expected to provide leadership beyond actual patient care.

"2. Don't exaggerate the power and ill will of those referred to as 'limousine liberals' and 'social planners.' To say, as Doctor Tallant did, that they wish to 'nail to the wall' a profession that is essential to the general welfare and which enjoys so much public confidence sounds so unlikely that the average practicing doctor is apt to quit reading or listening then and there. If he does believe you he is apt to conclude that his adversary is invincible and that it is better to lose by default



With QUĪ-A-ZONE — you can sedate effectively. A balanced combination of short, intermediate, and long-acting barbiturates (totaling 100 mg.) in a rapidly disintegrating tablet — sedation is provided within a few minutes . . . followed by sound restful sleep . . . usually without morning hangover. The four barbiturates in QUĪ-A-ZONE have dual channels of elimination (renal and hepatic) to lessen metabolic burden, decrease barbiturate retention, and minimize depression.

QUĪ-A-ZONE™

Each rapidly-disintegrating tablet contains 25 mg. secobarbital, 25 mg. pentobarbital, 25 mg. butabarbital, and 25 mg. phenobarbital. Bottles of 100.
Usual Adult Dose: 1 to 2 tablets before retiring.
PRECAUTION: Should not be administered to patients sensitive to barbiturates, or in cases of known previous addiction. Warning: May be habit forming.

W-C PRECISION PHARMACEUTICALS

SEND FOR SAMPLES.
WALKER, CORP & CO., INC.
Syracuse, New York 13201

than to exhaust himself in a futile effort to avoid the inevitable.

"3. Define the problems in simple terms. For instance, make it clear that peer review means that legible meaningful records must be kept and doctors must be willing to pass judgment. Otherwise Peer Review is a misnomer and it won't take long for third parties to devise another method of quality control which will probably be even less palatable.

"4. Recognize that many if not most doctors feel that their professional interests are best served through their specialty societies and their hospital staff organizations. Too often a county society finds it impossible to arrive at a consensus that is relevant to the problems of delivering medical care.

"5. Cool the hostility reflected in many of the discussions involving the relationship between doctors and the rest of society.

"6. Encourage specific constructive action in which all members of the health team can work together to achieve realistic goals. There has been too much of the dog-in-the-manger type of defense of territorial prerogatives to get the most out of available facilities and man power."

(The complete copy of Doctor Fopeano's article appeared in the May, 1971 issue of *Kalamazoo Medicine.*)

Interested physicians are invited to submit their comments on "How to Communicate" and send them to *Michigan Medicine* for publication. *Michigan Medicine* has sought in recent years to encourage physicians to react to questions by carrying a monthly "Your Opinion Please" article, and additional letters are printed regularly in the "Mailbag" feature.

Obstetricians and Gynecologists Choose New Leaders

The Michigan Society of Obstetricians and Gynecologists recently elected Lee B. Stevenson, MD, Detroit, as its president for the 1971-72 year. President-elect will be Joseph J. Woods, MD, Detroit, and treasurer, John M. Malone, MD, Detroit. Elected secretary was Robert G. Walkowiak, MD, Detroit.

Elected to two-year council terms were Ferdinand Gaensbauer, MD, Pontiac, Donald T. Olson, MD, Detroit, Kenneth J. Vander Kolk, MD, Grand Rapids, and Joseph A. Caruso, MD, Lansing. One year terms of council appointment will be filled by James F. Pingel, MD, Royal Oak, and Eli J. Igna, MD, Detroit.

check these figures...

they could lead to savings

Umbrella Excess Liability Policy — Our Schedule

- ✓ Physicians Class 1 & 2 . . $121.00 Annual Premium*
- ✓ Physicians Class 3, 4 & 5 . $205.00 Annual Premium*

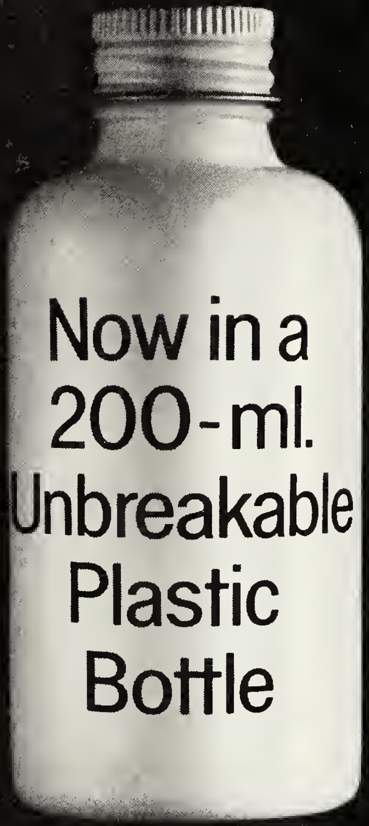
* The above premiums assume ownership or use of 2 residences, 2 automobiles, professional liability exposure (basically insured for $100,000/$300,000), and professional office premises exposure. These premiums do not include basic Malpractice coverage. The Umbrella plan is sponsored by the Michigan State Medical Society while the basic Malpractice policy is not.

CALL US COLLECT (517) 484-2578

bps **BEN P. STRATTON AGENCY, INC.**
ESTABLISHED IN 1937

107 N. BUTLER BLVD.
LANSING, MICHIGAN 48903
(517) 484-2578

19400 WEST TEN MILE ROAD
SOUTHFIELD, MICHIGAN 48075
357-5083


Now in a
200-ml.
Unbreakable
Plastic
Bottle

Same price as 150-ml. size*

Two dosage strengths–
125 mg./5 ml.
and
250 mg./5 ml.

V-Cillin K,® Pediatric

potassium phenoxymethyl penicillin

Lilly

100210

Additional information available to the profession on request.

Eli Lilly and Company
Indianapolis, Indiana 46206

**Based on Lilly selling price to wholesalers.*

Consumption Coagulopathy:

Practicle Principles of Diagnosis and Management

By Robert M. Nalbandian, MD
Raymond L. Henry, PhD
Eberhard F. Mammen, MD
Dale L. Kessler, MD
Paul L. Wolf, MD
LTC Frank R. Camp, Jr., MSC, USA
COL Nicholas F. Conte, MC, USA

One of the most important recent contributions to clinical medicine is the unifying concept of disseminated intravascular coagulation (DIC) or consumption coagulopathy (CC) as an intermediary mechanism of disease and death.[1,2] Recognition of CC as a clinical entity involving the coagulability of blood was related to the discovery by Schneider[3] that the active principle of placental toxin in placenta abruptio was thromboplastin. The nature of the blood coagulation mechanism and disseminated intravascular coagulation to problems in obstetrics and gynecology was reported by Seegers and Schneider as early as 1951.[4] CC has great clinical importance, not only because it is a common pathway of death in diverse multiple diseases and disorders, but also because with proper and precise treatment an extended interval of life can be achieved, allowing additional time for diagnosis and treatment of the primary disease. At such a time the CC will subside spontaneously. In some cases, the underlying disease, e.g., malignancy, is incurable and prognosis for extended life is hopeless. CC is recognized in a growing list of conditions (Table I) and often is amenable to treatment. It must be appreciated that not all diseases manifest CC, nor do those conditions in which a mild degree of CC may be present require treatment. Unquestionably, many cases of CC are subclinical, undetected, and spontaneously remitted. But, in those cases where it is a foudroyant threat to life, accurate diagnosis and prompt, correct therapy are required if the patient is to recover.

Discussion

As proposed by Seegers[5] the coagulation mechanism involves three basic reactions: (1) the formation of autoprothrombin C (F-X_a, thrombokinase, Stuart factor); (2) the formation of thrombin; and (3) the formation of fibrin. An updated version of these concepts is presented in Figure 1.

CC is a distortion of normal coagulation and fibrinolytic mechanisms. Among coagulationists, there is a growing view that under normal conditions, there is a nicely balanced, dynamic equilibrium between continuous coagulation by the intrinsic coagulation system in the arteries and arterioles, and continuous fibrinolysis by the fibrinolytic system primarily in the capillaries. The scheme in Figure 1 summarizes the events discussed in this report and should be referred to frequently.

Blood is continuously clotted and lysed intravascularly at a slow rate. In a substantial variety of diseases the two basic counterpoised activities

---

Doctor Nalbandian is associate pathologist at Blodgett Memorial Hospital, Grand Rapids and also Adjunct Associate Professor of Physiology at Wayne State University School of Medicine and Doctor Kessler is associate director of laboratories Blodgett Memorial Hospital, Grand Rapids. Dr. Henry is an associate professor of Physiology and Dr. Mammen is professor of Physiology, School of Medicine, Wayne State University, Detroit. Dr. Wolf is an associate professor of Physiology and Director of Clinical Laboratories, Stanford University Medical Center, Stanford, Calif. LTC Camp is director of Blood Transfusion Division and COL Conte, Commanding Officer, US Army Medical Research Laboratory, Fort Knox, Ky.

Supported in part by the Michigan Heart Association.

Reprint requests to: Robert M. Nalbandian, MD, Dept. of Pathology, Blodgett Memorial Hospital, Grand Rapids, Michigan 49506.

This paper will be presented as a seminar at the 106th Annual Meeting of the Michigan State Medical Society.

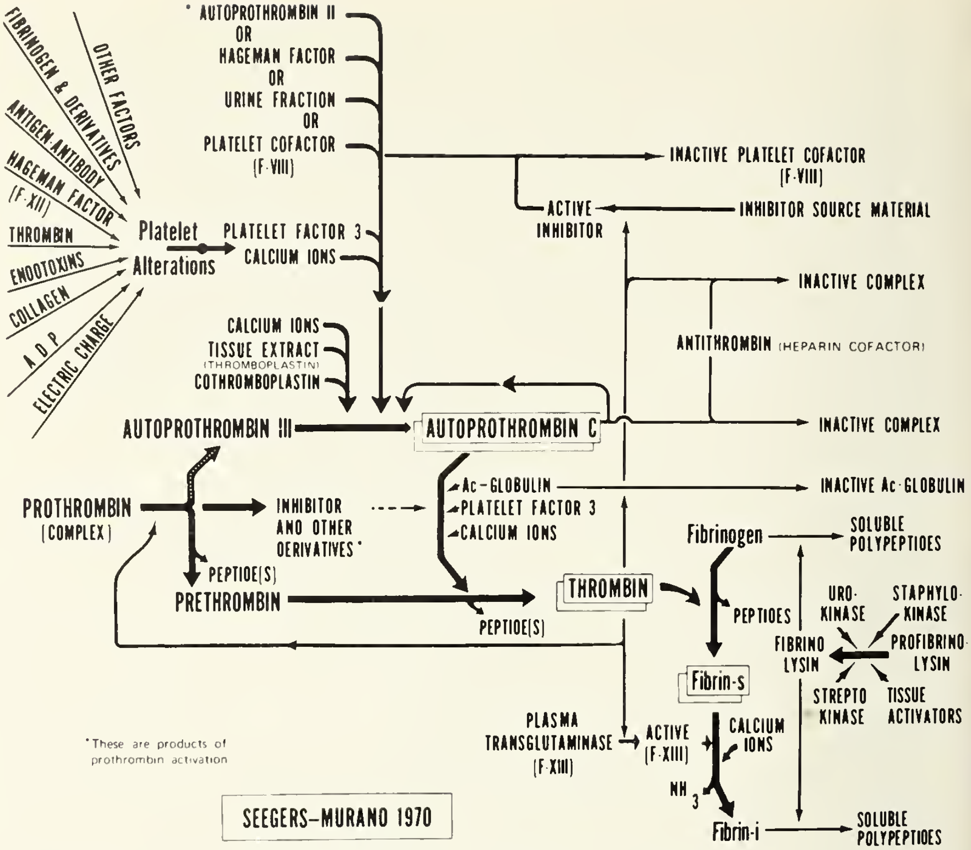

FIBRINOGEN & DERIVATIVES
OTHER FACTORS
ANTIGEN-ANTIBODY
HAGEMAN FACTOR (F-XII)
THROMBIN
ENDOTOXINS
COLLAGEN
A D P
ELECTRIC CHARGE
Platelet Alterations
* AUTOPROTHROMBIN II OR HAGEMAN FACTOR OR URINE FRACTION OR PLATELET COFACTOR (F-VIII)
PLATELET FACTOR 3
CALCIUM IONS
INACTIVE PLATELET COFACTOR (F-VIII)
ACTIVE INHIBITOR
INHIBITOR SOURCE MATERIAL
INACTIVE COMPLEX
ANTITHROMBIN (HEPARIN COFACTOR)
CALCIUM IONS
TISSUE EXTRACT (THROMBOPLASTIN)
COTHROMBOPLASTIN
AUTOPROTHROMBIN III
AUTOPROTHROMBIN C
INACTIVE COMPLEX
PROTHROMBIN (COMPLEX)
INHIBITOR AND OTHER DERIVATIVES*
Ac-GLOBULIN
PLATELET FACTOR 3
CALCIUM IONS
INACTIVE Ac-GLOBULIN
Fibrinogen
SOLUBLE POLYPEPTIDES
PEPTIDE(S)
PRETHROMBIN
PEPTIDE(S)
THROMBIN
PEPTIDES
URO-KINASE
STAPHYLO-KINASE
FIBRINO LYSIN
PROFIBRINO-LYSIN
STREPTO KINASE
TISSUE ACTIVATORS
Fibrin-s
PLASMA TRANSGLUTAMINASE (F-XIII)
ACTIVE (F-XIII)
CALCIUM IONS
NH3
Fibrin-i
SOLUBLE POLYPEPTIDES
*These are products of prothrombin activation
SEEGERS–MURANO 1970

FIGURE 1: This recent scheme by Seegers and Murano indicates that the procoagulants generated during the activation of clotting are neutralized by inhibitors and that fibrin can be lysed by the fibrinolytic mechanism and cellular phagocytosis. Heparin accelerates the neutralization of thrombin and autoprothrombin C by antithrombin. Heparin also enhances the anticoagulant properties of FSP and functions synergistically with antithrombin in consumption coagulopathy produced by primary activation of the fibrinolytic system. Trasylol inhibits fibrinolytic activity, fibrinolysin activators, and in addition, inhibits thromboplastin in the extrinsic clotting system. Epsilon amino caproic acid inhibits only the action of fibrinolytic activators.

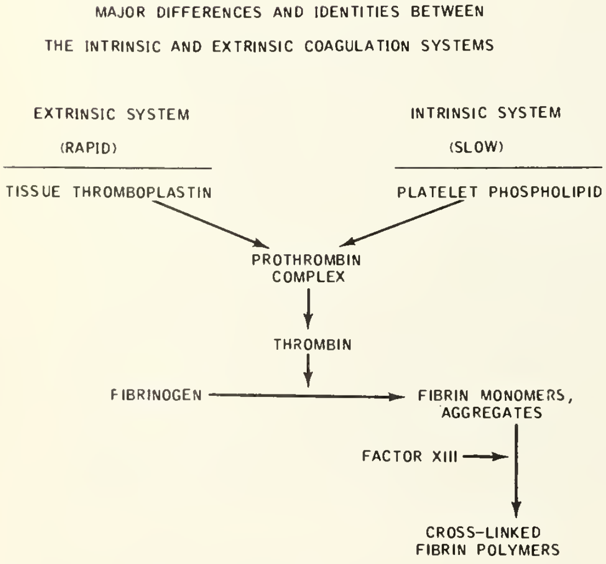

MAJOR DIFFERENCES AND IDENTITIES BETWEEN
THE INTRINSIC AND EXTRINSIC COAGULATION SYSTEMS
EXTRINSIC SYSTEM
(RAPID)
INTRINSIC SYSTEM
(SLOW)
TISSUE THROMBOPLASTIN
PLATELET PHOSPHOLIPID
PROTHROMBIN COMPLEX
THROMBIN
FIBRINOGEN
FIBRIN MONOMERS, AGGREGATES
FACTOR XIII
CROSS-LINKED FIBRIN POLYMERS

FIGURE 2: The major differences and the major identities between the intrinsic and the extrinsic coagulation systems are summarized in this figure. Note that the extrinsic system of coagulation is more rapid, clotting plasma in seconds, and requires the action of tissue thromboplastin. The intrinsic system is slow, clotting plasma in minutes, and requires the action of platelet phospholipids. From the point where prothrombin complexes are formed, both coagulation systems have a common route.

TABLE 1

CLINICAL ENTITIES ASSOCIATED WITH CONSUMPTION COAGULOPATHIES*

I. ACTIVATION OF CLOTTING SYSTEM PREDOMINANTLY:

CLINICAL ENTITY

1. Human equivalent of Sanarelli-Shwartzman reaction
2. Thrombotic thrombocytopenic purpura (Moschcowitz's syndrome)
3. Purpura fulminans
4. Hemolytic-uremic syndrome (Gasser's syndrome)
5. Kasabach-Merritt syndrome
6. Septic shock
7. Incompatible hemolytic blood transfusion disease

II. ACTIVATION OF FIBRINOLYTIC SYSTEM PREDOMINANTLY:

CLINICAL ENTITY

1. Pre-operative anxiety
2. Pulmonary surgery
3. Prostate gland surgery
4. Neurosurgery
5. Open heart surgery

III. SIMULTANEOUS OR CO-EQUAL ACTIVATION OF CLOTTING SYSTEM AND FIBRINOLYTIC SYSTEM:

CLINICAL ENTITY

1. Abruptio placentae
2. Dead fetus syndrome
3. Amniotic fluid embolism

IV. OTHER CLINICAL ENTITIES EXHIBITING CONSUMPTION COAGULOPATHY

Fulminant fat embolism syndrome
Acute promyelocytic leukemia
Liver cirrhosis
Paroxysmal nocturnal hemoglobinuria
Sickle cell disease
Favism
Paroxysmal cold hemoglobinuria
Malaria
Parathormone poisoning
Virus and Rickettsial diseases
Dietary lipids
Non-bacterial thrombotic endocarditis
Acute renal failure
"Hyper-immune" response, kidney allograft
Thrombocytopenia (some cases)
Cryofibrinogenemia
Primary pulmonary hypertension
Eclampsia
Septic abortion
Premature rupture of membranes with chorio-amnionitis
Hydatidiform mole
Panhypopituitarism
Carcinoma
Hemorrhagic pancreatitis
Ulcers, gastrointestinal tract
Pseudomembranous enterocolitis
Cyanotic congenital heart disease
Infantile diarrhea
Meningococcemia
Waterhouse-Friderichsen syndrome
Intussusception
Pyoderma gangrenosum
Generalized vaccinia
Miliary tuberculosis
Undiscovered conditions

---

*In the clinical course of consumption coagulopathy the basic pathophysiology may change from one category to another, requiring periodic monitoring of the disorder by a "coagulation panel" of tests.

TABLE I: This table lists clinical entities in which CC has been associated in the role of an intermediary mechanism of the disease and death. Although not absolutely consistent in every clinical case, several conditions can be typically characterized as resulting from: (1) primary activation of the coagulation system (2) primary activation of the fibrinolytic system or (3) simultaneous or equal activation of both systems. Since CC is a dynamic pathophysiologic disorder, being further modulated by the clinical events and evolution of the underlying and triggering disease or disorder, it becomes apparent that the type of CC may change character over an interval of time. This table was developed by one of us.[6]

of clotting and lysis can be accelerated, either singly or concomitantly. Thus, there are three types of CC. It is important to diagnose and categorize each type correctly, because treatment is type-specific and can be lethal if incorrectly utilized. The three major types of CC are: (1) primary or predominant activation of the intrinsic and/or extrinsic coagulation system with a beneficial, mild secondary activation of the fibrinolytic system; (2) primary or predominant activation of the fibrinolytic system; (3) activation of both systems simultaneously. While the classification of clinical entities associated with CC (Table I) is helpful, it is not to be considered as an absolute guide, since other concomitant factors in the clinical context may modulate the CC sufficiently to alter its character and, therefore, the therapy required. Thus, the clinical course of CC must be monitored frequently by appropriate, simple laboratory methods.

Intrinsic and Extrinsic Coagulation Systems

Figure 2 summarizes the significant differences between the intrinsic and extrinsic systems. The extrinsic coagulation system is accelerated by the presence of tissue thromboplastin and results in a *rapid* clotting of the plasma within seconds. The intrinsic coagulation system is activated by the presence of platelet phospholipid and is *slower,* requiring minutes for the coagulation of plasma. From that point onward in the coagulation sequence where prothrombin complex is converted to thrombin, the intrinsic and extrinsic coagulation systems follow a common pathway (Figs. 1 and 2). For purposes of simplicity, we will speak in terms of the intrinsic coagulation system throughout this report, with the understanding that the extrinsic coagulation system is also included, but is less frequently involved in cases of CC.

Primary Activation of the Intrinsic Coagulation System

The significant events in the primary activation of the intrinsic coagulation system are summarized in Figure 3. Note that with the activation of the intrinsic coagulation system predominantly there is an *intravascular* conversion of plasma to serum with the production of disseminated minute fibrin clots. If this course of events were allowed to continue with the transformation of plasma from a liquid to a solid phase, death would obviously ensue. The fact that patients do survive the catastrophe is explained by the secondary activation of the fibrinolytic system as shown in Figure 3.

The basic pathophysiology of primary activation of the intrinsic coagulation system is summarized in Figure 4. With the intravascular conversion of plasma into serum, alterations occur among several coagulation factors. The differences in these factors between plasma levels under normal conditions and under pathological conditions are indicated. At this point attention is directed to the presence of soluble fibrin monomer complexes (SFMC) which appear with the activation of the intrinsic coagulation system (see appendix). Among the SFMC is a uniquely clottable SFMC. The pivotal diagnostic significance of this *clottable* polypeptide will be discussed subsequently.

Primary Activation of the Fibrinolytic System

The important events in the primary activation of the fibrinolytic system are schematically shown in Figure 5. Note that profibrinolysin activators, rather than fibrinolysin per se, control the rate of fibrinolytic activity. Furthermore, it should be appreciated that fibrinolysin acts on the substrate, the fibrinogen of plasma, producing a mimetic "serum." This "serum" is analogous to, but not identical with, the true serum produced by the primary activation of the intrinsic coagulation system. The differences between these two types of "sera" can be easily understood by referring

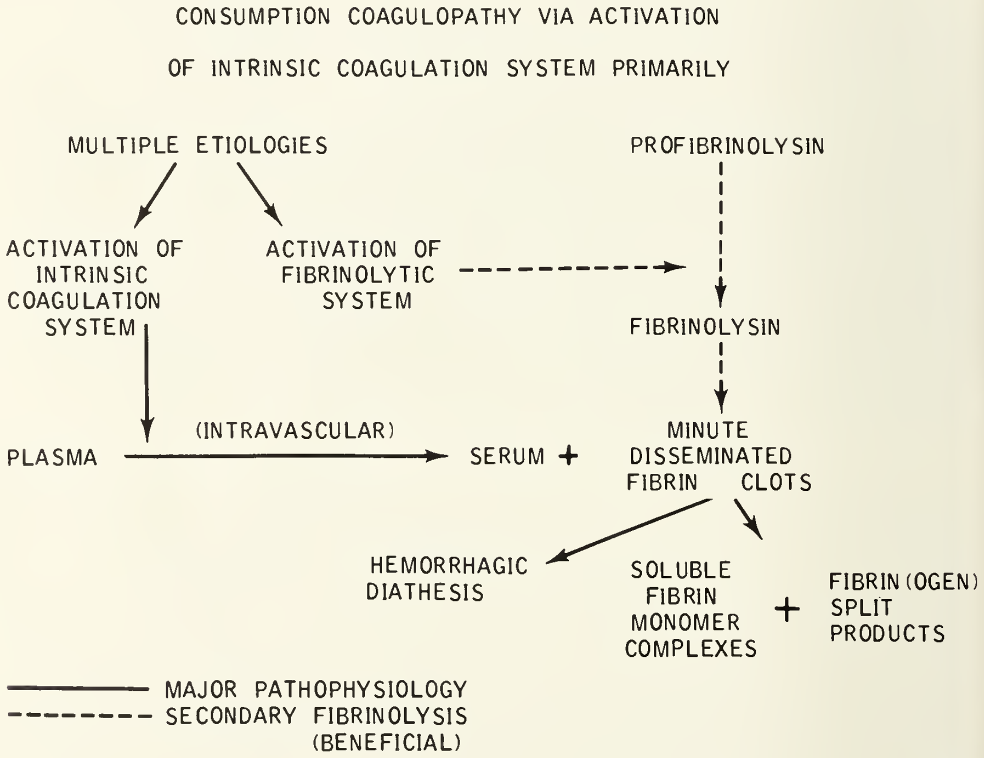
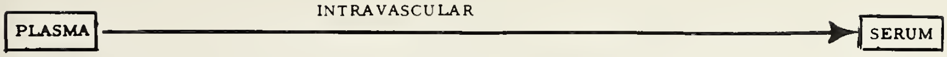

CONSUMPTION COAGULOPATHY VIA ACTIVATION
OF INTRINSIC COAGULATION SYSTEM PRIMARILY
MULTIPLE ETIOLOGIES
PROFIBRINOLYSIN
ACTIVATION OF INTRINSIC COAGULATION SYSTEM
ACTIVATION OF FIBRINOLYTIC SYSTEM
FIBRINOLYSIN
(INTRAVASCULAR)
PLASMA
SERUM +
MINUTE DISSEMINATED FIBRIN CLOTS
HEMORRHAGIC DIATHESIS
SOLUBLE FIBRIN MONOMER COMPLEXES
+
FIBRIN(OGEN) SPLIT PRODUCTS
MAJOR PATHOPHYSIOLOGY
SECONDARY FIBRINOLYSIS (BENEFICIAL)

FIGURE 3: This figure summarizes the significant metabolic events in the primary activation of the intrinsic coagulation system. Note that there is a conversion intravascularly of plasma to serum with the formation of minute disseminated fibrin clots, soluble fibrin monomer complexes, and fibrinogen split products. Also note that there is a secondary, subordinate lifesaving activation of the fibrinolytic system which is **NOT** to be confused with primary activation of the fibrinolytic system. (See text.)

BASIC PATHOPHYSIOLOGY OF PRIMARY ACTIVATION
OF INTRINSIC COAGULATION SYSTEM



PLASMA LEVEL	FACTOR NUMBER	FACTOR NAME	SERUM LEVEL
NORMAL VALUES	I	FIBRINOGEN	↓
	II	PROTHROMBIN	↓
	III	TISSUE THROMBOPLASTIN	
	IV	CALCIUM	
	V	ACCELERATOR GLOBULIN	↓
	VI	NONE	
	VII	AUTOPROTHROMBIN – I (PROCONVERTIN)	
	VIII	ANTIHEMOPHILIC GLOBULIN	↓
	IX	AUTOPROTHROMBIN – II (PTC) (CHRISTMAS FACTOR)	CONSUMED
	X	AUTOPROTHROMBIN – III – C (STUART–PROWER FACTOR)	CONSUMED
	XI	PTA	
	XII	HAGEMAN FACTOR	
	XIII	FIBRIN STABILIZING FACTOR	CONSUMED
		PLATELET COUNT	REDUCED
		SOLUBLE FIBRIN MONOMER COMPLEXES	PRESENT
		FIBRINOGEN SPLIT PRODUCTS	PRESENT

FIGURE 4: This figure summarizes the basic pathophysiology of the primary activation of the intrinsic coagulation system. Note that there is an intravascular conversion of plasma to serum. Those coagulation factors which are significantly deviated from normal levels are shown on the extreme right. Those changes particularly to be noted are the drop in the fibrinogen level, the prothrombin activity, and the platelet count; all occurring as plasma is converted to serum. Note, also, that there are formed soluble fibrin monomer complexes (including the clottable form) and fibrinogen split products. (See text.)

to Figure 2. With primary activation of the intrinsic coagulation system, it will be noted that prothrombin and thrombin are involved in the sequence of clotting events. On the other hand, with primary activation of the fibrinolytic system, fibrinogen is utilized directly as a substrate for fibrinolysin, independently of the events leading to thrombin formation. Thus, because different enzyme-substrate systems are involved, it follows that "sera" produced by primary activation of each of these two systems will necessarily be characteristically and diagnostically different.

In Figure 5 it will be seen that coincidental with the production of "serum," when the fibrinolytic system is primarily activated, fibrinogen split products (FSP) are produced as well. These FSP consist of a heterogenous collection of polypeptides (which the coagulationists are now characterizing chemically) and have a profound anticoagulant effect on the coagulation system (see appendix). Under pathological conditions FSP can exacerbate the hemorrhagic diathesis. Furthermore, any clots produced in the presence of this activated system are likely to be defective. The absence of clot formation is more often the case.

Figure 6 summarizes the coagulation events typical or characteristic of primary activation of the fibrinolytic system. Resultant changes among the several coagulation factors are indicated as again plasma is *intravascularly converted to a "serum."* A comparison of the resultant "sera" produced by both primary systems (compare Figs. 4 and 6) will be most instructive. It should be evident then that, while activation of both the fibrinolytic system and the coagulation system produces "sera," these two "sera" have diagnostically

CONSUMPTION COAGULOPATHY VIA ACTIVATION OF FIBRINOLYTIC SYSTEM PRIMARILY

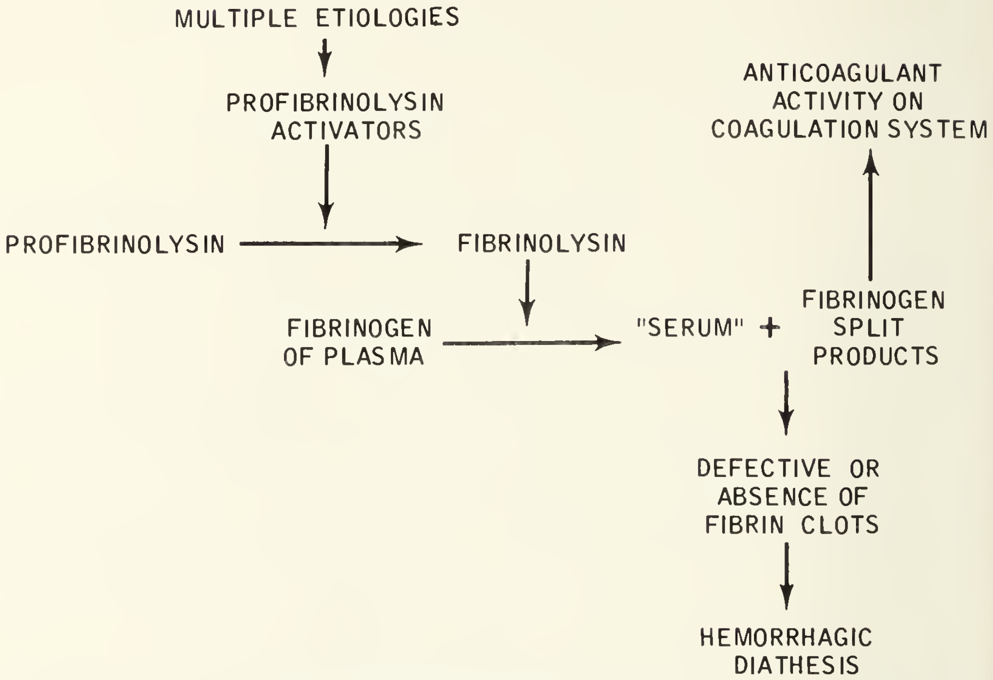

MULTIPLE ETIOLOGIES
PROFIBRINOLYSIN ACTIVATORS
PROFIBRINOLYSIN
FIBRINOLYSIN
ANTICOAGULANT ACTIVITY ON COAGULATION SYSTEM
FIBRINOGEN OF PLASMA
"SERUM" +
FIBRINOGEN SPLIT PRODUCTS
DEFECTIVE OR ABSENCE OF FIBRIN CLOTS
HEMORRHAGIC DIATHESIS

FIGURE 5: The important metabolic events in the primary activation of the fibrinolytic system are shown in this figure. Note that profibrinolysin activators rather than fibrinolysin control the rate of activity on the substrate, the fibrinogen of plasma, and its conversion into fibrinogen split products. A study of Figure 2 will reveal that primary activation of the coagulation system occurs at a different point in the metabolic map than does primary activation of the fibrinolytic system while a "serum" with demonstrable distinctions from true serum is formed by primary activation of the fibrinolytic system. (See text.) Compare Figures 4 and 6.

PARAMETERS	ACTIVATION OF INTRINSIC COAGULATION SYSTEM PRIMARILY (COMMON)	ACTIVATION OF FIBRINOLYTIC SYSTEM PRIMARILY (RARE)	CO-EQUAL ACTIVATION OF BOTH SYSTEMS (FREQUENT)
FIBRINOGEN	↓	↓	↓
PLATELETS	↓	NORMAL (ALMOST ALWAYS)	↓
FACTORS V, VIII ACTIVITIES	↓	↓	↓
PROTHROMBIN TIME	PROLONGED	NORMAL TO PROLONGED	PROLONGED
CLOTTABLE SOLUBLE FIBRIN MONOMER COMPLEX	PRESENT	ABSENT	PROBABLY NEGATIVE
FIBRINOLYTIC ACTIVITY	NORMAL TO SLIGHTLY ↑	↑ TO ↑ ↑ ↑	↑ ↑ ↑

TABLE II: This table lists some of the coagulation parameters altered in the course of the 3 types of consumption coagulopathy. Note that the most useful parameters diagnostically consist of the fibrinogen level, the platelet count, the prothrombin time, the absence or presence of the clottable soluble fibrin monomer complex, and the determination of fibrinolytic activity. It becomes apparent that determination of Factor V and Factor VIII activities is neither essential nor of differential diagnostic value. With equal activation of both systems a combination of qualitative changes in the parameters will be evident.

BASIC PATHOPHYSIOLOGY OF PRIMARY ACTIVATION
OF FIBRINOLYTIC SYSTEM

PLASMA —— INTRAVASCULAR ——→ MIMETIC "SERUM"

PLASMA LEVEL	FACTOR NUMBER	FACTOR NAME	SERUM LEVEL
NORMAL VALUES	I	FIBRINOGEN	↓
	II	PROTHROMBIN	NORMAL
	III	TISSUE THROMBOPLASTIN	
	IV	CALCIUM	
	V	ACCELERATOR GLOBULIN	↓
	VI	NONE	
	VII	AUTOPROTHROMBIN – I (PROCONVERTIN)	
	VIII	ANTIHEMOPHILIC GLOBULIN	↓
	IX	AUTOPROTHROMBIN – II (PTC) (CHRISTMAS FACTOR)	
	X	AUTOPROTHROMBIN – III – C (STUART–PROWER FACTOR)	
	XI	PTA	
	XII	HAGEMAN FACTOR	
	XIII	FIBRIN STABILIZING FACTOR	
		PLATELET COUNT	NORMAL USUALLY
		CLOTTABLE SOLUBLE FIBRIN MONOMER COMPLEX	ABSENT
		FIBRINOGEN SPLIT PRODUCTS	↑ ↑ ↑

FIGURE 6: This figure summarizes the basic pathophysiology of the primary activation of the fibrinolytic system as plasma is converted intravascularly to a "serum." Those coagulation factors which are significantly deviated from normal levels are shown in the extreme right. Note that as "serum" is formed there is a drop in the level of fibrinogen. In contrast to the primary activation of the coagulation system, note that in this figure the prothrombin activity remains normal and the platelet count usually remains normal. Note especially that **clottable** SFMC is not produced in this type of CC. (See text.) However, fibrinogen split products are markedly increased (see appendix).

different characteristics and thus form the basis for a differential diagnosis.

Differential Diagnosis of Consumption Coagulopathy

In Table II are listed some of the coagulation parameters altered in the course of CC, both with primary activation of the intrinsic coagulation system and with primary activation of the fibrinolytic system. It will be seen that fibrinogen, and Factor V and Factor VIII activity, are depressed in both conditions. The features of differential importance, then, include platelets, the presence or absence of the clottable SFMC and the degree of fibrinolytic activity. Based on these parameters, a coagulation profile or panel composed of simple tests can be defined which will lend itself to convenient periodic repetition.

Consumption Coagulopathy Panel

In Table III are listed in one column the parameters of coagulation which are significantly affected in the disorders of CC, and in the other column appropriate corresponding tests which constitute the CC panel used by us. This panel is repeated as frequently as is necessary, or at least at 12-hour intervals. By observing the values of the several coagulation factors as they shift toward serum or toward plasma, the clinician may evaluate effectiveness of treatment and adjust dosage. Patients must also be observed for a possible change in the type of CC as a consequence of the clinical evolution of the underlying disease. This constitutes another reason for periodic repetition of the CC panel. Since this profile of tests will be repeated frequently, the tests must be simple, reliable, and the panel must consist of a minimum

PARAMETER AFFECTED	APPROPRIATE TEST
FIBRINOGEN	"PLASMA" FIBRINOGEN LEVEL
PLATELETS	PLATELET COUNT
PROTHROMBIN	PROTHROMBIN TIME
CLOTTABLE SOLUBLE FIBRIN MONOMER COMPLEX	GLUECK MODIFICATION OF ETHANOL GELATION TEST OF BREEN AND TULLIS
PROFIBRINOLYSIN ACTIVATORS	EUGLOBULIN LYSIS TIME
ACTIVITY OF INTRINSIC SYSTEM*	PARTIAL THROMBOPLASTIN TIME
ERYTHROCYTES	FRAGMENTATION NOTED IN PERIPHERAL BLOOD SMEAR

*Not to be repeated while the patient is being treated with heparin.

TABLE III: In this table we have listed the coagulation parameters and the corresponding simple, appropriate tests which constitute our "Consumption Coagulopathy Panel." These parameters are measured by the indicated tests periodically, at least every 12 hours, and more often if indicated. The quantitative variations in these periodic determinations among the several parameters are an index of the efficacy of treatment, the adequacy of dosage levels, and a survey of the character of the CC.

While the determination of the parameters listed in the left hand column is all that is necessary to diagnose and evaluate CC, it is fully expected that the list of appropriate tests in the right hand column will vary from hospital laboratory to hospital laboratory, reflecting aspects of interest, sophistication, and capability. The basic set of coagulation parameters will be the same regardless of which type of test is used for evaluation.

set of tests without sacrificing accuracy of diagnosis.

In Table III we have listed those tests which we have found to be reliable in our laboratories. Other laboratories undoubtedly will prefer their own particular constellation of tests. Because there are a multiplicity of coagulation tests and because there are differences of interest and of capability from laboratory to laboratory, it will probably be necessary for each laboratory to compose its own CC panel. Thus, the clinician suspecting CC must, from the very beginning, work in close consultation with his pathologist in the diagnosis and management of CC.

While most of the tests in Table III are well known to all laboratories, brief comment about some of them is required.

Almost invariably with primary activation of the coagulation system, platelets will be depressed significantly. On the other hand, platelets are almost invariably at normal levels in presence of primary activation of the fibrinolytic system. In addition, platelet counts vary directly with the amount of blood given. Thus, platelet counts are almost always, but not absolutely, reliable in the differential diagnosis.

It is not essential to assay the activity of Factors V and VIII since they are both depressed whether the intrinsic coagulation system or the fibrinolytic system is primarily activated. In addition, the assay methods are not generally available in most hospital laboratories. So Factor V and Factor VIII activity assays have *not* been included in our consumption coagulopathy panel.

The two-stage prothrombin assay is a more accurate measure of prothrombin activity, but the one-stage Quick prothrombin time has proven useful in application to clinical problems. It should be noted, however, that prothrombin time may be prolonged in both primary types of CC. In activation of intrinsic coagulation system primarily prothrombin is consumed. In primary fibrinolysis the FSP act as inhibitors of prothrombin activation rendering the assay procedure dubious.

The Glueck modification[7] of the Ethanol Gelation Test[8,9] is most useful in the diagnosis of the type of CC and is of pivotal importance. This test will detect the presence or absence of a clottable soluble fibrin monomer complex (SFMC) in plasma.[7-10] According to Niewiarowski[11] there are at least two forms of SFMC. One form, the direct result of the action of thrombin, consists of a complex of fibrinogen and fibrin monomers and is clottable by thrombin. The other form of SFMC is non-clottable and consists of soluble fibrin monomers complexed with fibrinogen split products. The Ethanol Gelation Test detects the presence of the *clottable form of SFMC*. Under the conditions of the Glueck modification[7] a positive test* indicates acceleration of the activity of the coagulation system. In cases of CC due to primary activation of the fibrinolytic system, the Ethanol Gelation Test will be negative, since the clottable form of SFMC will not be present. This test is highly pertinent, since it discriminates between accelerated intrinsic coagulation and accelerated fibrinolysis.

The euglobulin lysis time is a test of considerable differential significance also, since it measures the activity of profibrinolysin activators controlling the rate of fibrinolysis.[12] It can be anticipated from a study of Figure 3 that the euglobulin lysis time will be normal or perhaps slightly elevated in cases of primary activation of the intrinsic coagulation system. Under pathologic conditions with primary activation of the fibrinolytic system (Fig. 5), the euglobulin lysis time will likely be markedly shortened, often to a matter of a few minutes. In rare, severe cases, activation of this system may be so marked and the fibrinogen level so depressed that no clot can be formed initially in the performance of the euglobulin lysis time test.

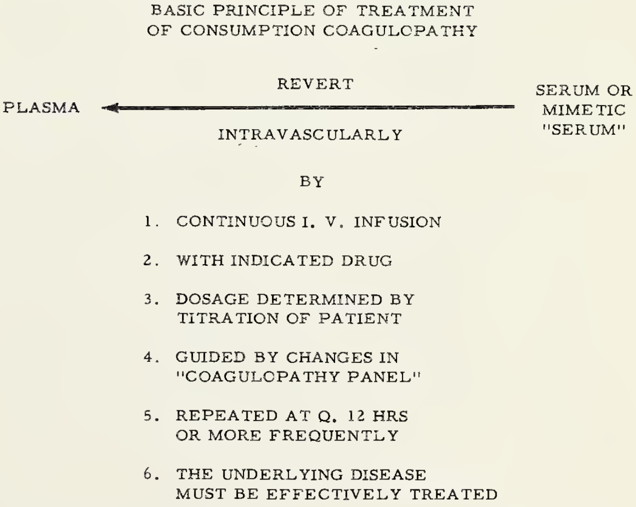
The partial thromboplastin time is a measure of the overall activity of the intrinsic coagulation system. This test is diagnostically useful only initially before treatment. In those cases of consumption coagulopathy treated with heparin (see below), the partial thromboplastin time will be markedly prolonged due to the heparin. It is pointless to repeat the test after the diagnosis has been made initially.

Finally, CC sometimes—but not always—is accompanied by fragmentation of erythrocytes,[13,14] a diagnostic feature easily detected by examination of a finger-stick preparation of a peripheral blood smear.

Principles of Treatment

Treatment will be dictated by the determination of the type of CC present: (1) primary activation of the intrinsic coagulation system; (2) primary activation of the fibrinolytic system; or (3) equal activation of both systems. Approximately 90 percent or more of cases of CC are due to primary activation of the intrinsic coagulation system.[15] CC cases due to primary activation of the fibrinolytic system are encountered rarely.

The basic principle of treatment of CC is the intravascular reversion of serum or mimetic "serum" to plasma by the titration of the patient with continuous intravenous administration of the appropriate drug in dosage regulated by the response of individual coagulation parameters in a periodically repeated standard CC panel (Fig. 7).



1. CONTINUOUS I. V. INFUSION
2. WITH INDICATED DRUG
3. DOSAGE DETERMINED BY TITRATION OF PATIENT
4. GUIDED BY CHANGES IN "COAGULOPATHY PANEL"
5. REPEATED AT Q. 12 HRS OR MORE FREQUENTLY
6. THE UNDERLYING DISEASE MUST BE EFFECTIVELY TREATED

FIGURE 7: This figure summarizes the important aspects of the basic principle of the treatment of consumption coagulopathy, essentially the intravascular conversion of serum back to plasma. (See text for details.)

---

*We have noted the occurrence of false positive tests in the presence of some dysproteinemias and hyperglobulinemias which can be recognized by the addition of 1 drop of 0.1N NaOH as the last step in the Glueck[7] modification. False positive "gels" disappear and true gels persist in the alkalinized test system. At the suggestion of Dr. Glueck we routinely add to the working solution of the Ethanol Gelation Test 2 mg/ml of soybean trypsin inhibitor to arrest the enzymatic destruction of clottable SFMC by fibrinolysin.

As the coagulation parameters revert to normal under this management, and as the underlying disease triggering the CC has been brought under control, therapy for CC can be quickly discontinued since the CC will then spontaneously remit.

Primary activation of the intrinsic coagulation system produces a CC which is treated only with intravenous heparin continuously administered. Initially, 5,000 to 15,000 units of heparin may be given intravenously; thereafter 10,000 to 30,000 units of heparin per 24 hours are administered as guided by changes in the CC panel. Consumption coagulopathies of the type resulting from primary activation of the fibrinolytic system require epsilon aminocaproic acid* given intravenously; 4 to 5 g (16 to 20 ml) should be administered by infusion during the first hour of treatment followed by a continuing infusion at the rate of 1 g (4 ml) per hour. This regimen would ordinarily be continued for about 8 hours or until the bleeding situation has been controlled. Epsilon aminocaproic acid inhibits only the action of the fibrinolysin activators—not fibrinolysin itself—producing a therapeutic lag. In CC, with activation of both the coagulation system and fibrinolytic system, it is best to use herapin first with epsilon aminocaproic acid added subsequently if the laboratory data of repeated consumption coagulopathy panels indicate the need. Trasylol at appropriate dosage levels (known to inhibit fibrinolytic activity, fibrinolysin activators and thromboplastic activity) *would be* an appropriate drug for the treatment of CC of the equal activation type.[16] However, Trasylol has not been released for clinical use by the Federal Food and Drug Administration.

It is of crucial importance to categorize CC properly, and to select the appropriate treatment.[15] Erroneous interchanging of therapy relative to the category of CC present can be lethal. For example, if CC due to primary activation of the coagulation system is incorrectly treated with epsilon amino caproic acid, it will inhibit the lifesaving activity of the secondarily activated fibrinolytic system which assures the removal of fibrin as it is formed. On the other hand, the use of heparin in a case of CC of the type produced by primary activation of the fibrinolytic system will merely enhance the anticoagulant properties of the fibrinogen-split products, function synergistically with antithrombin, and exacerbate the hemorrhagic diathesis.

The appropriate drug must not only be administered in sufficient dosage to produce the desired effect; it must be given continuously. Otherwise, there will be intervals as the drug concentration falls below efficacious levels, which will permit incremental exacerbations of the CC. To avoid these intermittent therapeutic lapses, the selected drug, whether heparin or epsilon aminocaproic acid, should be administered intravenously and continuously by the use of infusion pumps.

To reiterate, as soon as the underlying disease triggering the CC is effectively treated, heparin therapy can be discontinued immediately. The heparin effect will be dissipated in 2 to 4 hours. However, CC panels should be determined periodically to monitor the heparin withdrawal interval and to assure that the CC does not recur.

While research in blood coagulation has produced an awesome body of intricately complicated information, at the same time coagulationists have provided us with an orderly and comprehensible system of principles and mechanisms in the area of CC which, when properly understood and correctly applied clinically, can be used successfully to treat critically ill patients.

Appendix

The role and fate of fibrinogen in coagulation, fibrinolysis and particularly in consumption coagulopathy is complex and the source of much confusion. In the following three figures we have attempted to clarify the complex relationship of fibrinogen subjected to the simultaneous action of thrombin and plasmin (fibrinolysin).

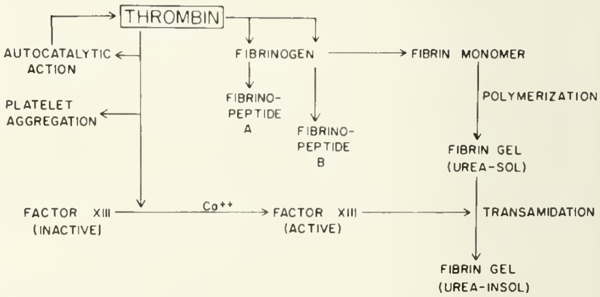


Figure A:
The enzyme thrombin has several functions: 1) it autocatalyzes the formation of additional thrombin from prothrombin, 2) it enhances platelet aggregation, the initial event in coagulation, 3) it converts factor XIII (fibrin stabilizing factor) to an active form, and 4) it splits first fibrinopeptide A and then fibrinopeptide B from the fibrinogen molecule, giving rise to a so-called fibrin monomer. The fibrin monomer is a hallmark of thrombin activity in the coagulation system. When it combines with a molecule of fibrinogen and forms the clottable soluble fibrin complex (CSFMC), its presence may be **selectively detected** by the Glueck modification[7] of the ethanol gelation test of Breen and Tullis (see text).

---

*AMICAR—Lederle.

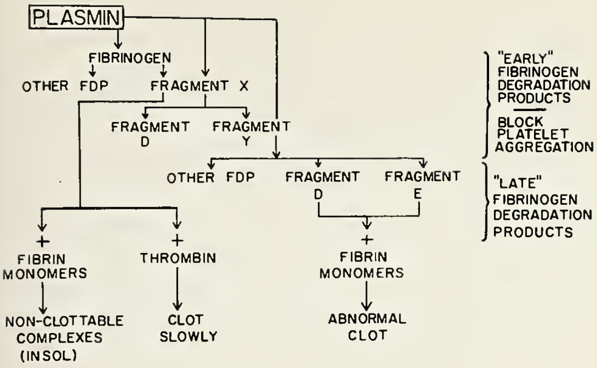

PLASMIN
FIBRINOGEN
OTHER FDP
FRAGMENT X
FRAGMENT D
FRAGMENT Y
OTHER FDP
FRAGMENT D
FRAGMENT E
+ FIBRIN MONOMERS
+ THROMBIN
+ FIBRIN MONOMERS
NON-CLOTTABLE COMPLEXES (INSOL)
CLOT SLOWLY
ABNORMAL CLOT
"EARLY" FIBRINOGEN DEGRADATION PRODUCTS
BLOCK PLATELET AGGREGATION
"LATE" FIBRINOGEN DEGRADATION PRODUCTS

Figure B:

Plasmin acts on fibrinogen to form a diversity of split products of varying molecular size and activity. The first cleavage results in fibrinogen degradation products of small molecular weight (not yet well characterized) and fragment X which has a molecular weight of about 80% of the original fibrinogen molecule. Fragment X is further digested by plasmin into a smaller fragment D and a large fragment Y. Fragment Y is cleaved further into a second fragment D, a fragment E, and other small degradation products. The early fibrinogen degradation products, principally fragments X and Y act as anti-coagulants by inhibiting platelet aggregation. By competitive inhibition both fragments compete for and bind fibrin monomers produced by the action of thrombin to form non-clottable complexes. The fragments also competitively inhibit the action of thrombin. Fragments D and E bind fibrin monomers, reducing their supply available to form normal clots. Plasmin of course also acts on the urea insoluble fibrin clot formed by thrombin (see figure A) to produce **fibrin** degradation products. Most paracoagulation tests (Fi test, protamine sulfate precipitin test, staphylococcal clumping test) react in a positive, non-discriminatory way to the presence of most of these numerous products in the plasma. Hence, they are of little direct value in diagnosing the presence and type of consumption coagulopathy underway in a patient. The Glueck modification[7] of the ethanol gelation test is most valuable, however (see text).

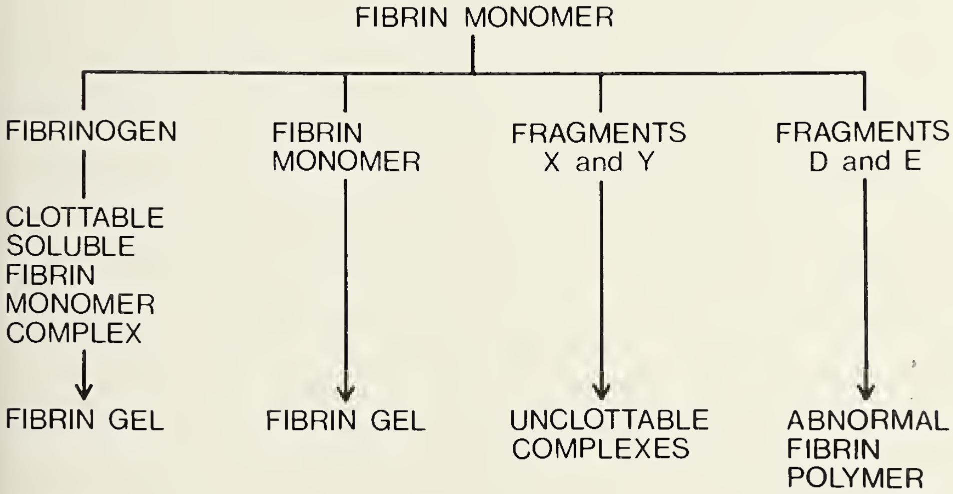

FIBRIN MONOMER
FIBRINOGEN
FIBRIN MONOMER
FRAGMENTS X and Y
FRAGMENTS D and E
CLOTTABLE SOLUBLE FIBRIN MONOMER COMPLEX
FIBRIN GEL
FIBRIN GEL
UNCLOTTABLE COMPLEXES
ABNORMAL FIBRIN POLYMER

Figure C:

This figure (modified from Deykin, **New England Journal of Medicine** 283:636-644, 1970) recapitulates the metabolic routes available to the fibrin monomer produced by the action of thrombin on fibrinogen. The coupling of fibrin monomer with fibrinogen to form a fibrin gel (extreme left of figure C) is detectable by the Glueck modification[7] of the ethanol gelation test of Breen and Tullis. When this product is present, it indicates an increased activity of the intrinsic or extrinsic coagulation system. This indicates increased intravascular thrombin formation which of course may not always mean consumption coagulopathy. However, when there is a significant consumption coagulopathy, these CSFMC will always be found provided the blood specimen is collected from the patient in soybean trypsin inhibitor as specified (see text) to prevent the destruction in the test tube by plasmin of this diagnostically important fibrinogen split product.

References

1. McKay, D. G.: Disseminated Intravascular Coagulation. New York, Harper & Row, 1965.
2. Hardaway, R. M., III: Syndromes of Disseminated Intravascular Coagulation. Springfield, Ill. Charles C. Thomas, 1966.
3. Schneider, C. L.: The Active Principle of Placental Toxin: Thromboplastin; Its Activator in Blood: Antithromboplastin. *Amer. J. Physiol.,* 149:123-129, 1947.
4. Seegers, W. H. and Schneider, C. L.: The Nature of the Blood Coagulation Mechanism and Its Relationship to Some Unsolved Problems in Obstetrics and Gynecology. *Trans. 4th Int. Amer. Cong. Obstet. Gynec.,* 61 A:469-480, 1951.
5. Seegers, W. H.: Blood Clotting Mechanisms: Three Basic Reactions. *Ann. Rev. Physiol.,* 31:269-294, 1969.
6. Mammen, E. F.: Professor of Physiology, School of Medicine, Wayne State University, Detroit, Michigan 48207.
7. Glueck, cited in Breen, F. A., Jr. and Tullis, J. L.: Ethanol Gelation Test Improved. *Ann. Intern. Med.,* 71:433-434, 1969.
8. Godal, H. C. and Abildgaard, U.: Gelation of Soluble Fibrin in Plasma by Ethanol. *Scand. J. Haemat.,* 3:342-350, 1966.
9. Breen, F. A., Jr. and Tullis, J. L.: Ethanol Gelation: A Rapid Screening Test for Intravascular Coagulation. *Ann. Intern. Med.,* 69:1197-1206, 1968.
10. Sasaki, T., et al: Stable Complex of Fibrinogen and Fibrin. *Science,* 152:1069-1071, 1966.
11. Niewiarowski, S.: New Tests for Diagnosis of Consumption Coagulopathy. *Thrombos. Diath. haemorrhag. Suppl.* 36:277-279, 1969.
12. Merskey, C., Johnson, A. J., Klewer, G. J., and Wohl, H.: The Defibrination Syndrome: Clinical Features and Laboratory Diagnosis. *Brit. J. Haemat.,* 13:528-548, 1967.
13. Rosner, F. and Rubenberg, M. L.: Erythrocyte Fragmentation in Consumption Coagulopathy. *New Eng. J. Med.,* 280:219-220, 1969.
14. Coleman, R. W.: Fragmentation of Erythrocytes. *New Eng. J. Med.,* 280:563, 1969.
15. Merskey, C., Johnson, A. J., Pert, J. H., and Wohl, H.: Pathogenesis of Fibrinolysis in Defibrination Syndrome: Effect of Heparin Administration. *Blood,* 25:701-715, 1964.
16. Amris, C. J.: Inhibition of Fibrinolytic and Thromboplastic Activity by Trasylol®. *Scand. J. Haemat.,* 3:19-32, 1966.

Treatment of Parkinsonism with Levo-dopa:

Results in 302 cases

By Tracy A. Newkirk, MD
Kenneth R. Magee, MD
Ann Arbor

More than 15 years ago it was demonstrated that reserpine reduces the content of monoamines in brain. Many investigators[1,4,6,11] have identified specific brain deficits associated with Parkinson's disease, the most striking of these being a reduction of dopamine in the basal ganglia. The therapeutic implications of this discovery were obvious, and studies were undertaken to determine whether melanin synthesis[3] could be favorably altered by administering precursors of dopamine such as phenylalanine, tryptophan, and D, L-dihydroxyphenylalanine (D, L-dopa). The attempts were largely unsuccessful; clinical effects were disappointing, and toxic reactions were common. There was some evidence that small intravenous doses of either D, L-dopa or L-dopa were beneficial in Parkinson's disease, but the general conclusion was that such therapy was not of practical value, because so many patients were affected by severe nausea and vomiting without significant improvement in any of the Parkinson symptoms.

When Cotzias, however, reported the successful use of D, L-dopa and then L-dopa, in large oral doses over long periods,[2] it became apparent that L-dopa would become a major therapeutic agent for the treatment of Parkinsonism. Several studies have now been reported which have indicated the relative safety and efficacy of L-dopa therapy, but most of these have included only small groups of patients (25 to 100) and treatment periods of less than a year. This report describes a large group of patients with Parkinsonism who have been followed in most instances for more than 2 years.

Materials and Methods

At the University of Michigan Medical Center our studies with L-dopa now include 450 patients with Parkinson's disease and several with other diseases of the basal ganglia. Of these, 302 cases have been analyzed in detail for this report—178 men including one East Indian, and 124 women including three Negroes. The majority of the patients were from 50 to 69 years old. Surgical treatment, usually cryogenic thalamotomy, had been carried out in 51 cases (29 men and 22 women). In 25 cases (12 men and 13 women) the disease was postencephalitic; the rest were considered idiopathic on the basis of clinical features, even though a family history of Parkinsonism was elicited in some cases. Drug-induced Parkinsonism was not included in this series, since it is a benign and reversible disorder for which experimental medication is not warranted.

At the outset of the clinical trial of L-dopa, patients with Parkinsonism were excluded who were over 70 years old, had an acute or chronic illness such as diabetes or heart disease, or had only a mild form of Parkinson's disease. After treatment of the first 50 patients was safely initiated, the criteria were broadened to include most patients with a diagnosis of Parkinsonism, whether or not the disease was mild or was complicated by other illness. Therefore the total series of 302 cases represents a relatively random series skewed only slightly by the selection of more severe cases in the initial phase of the study.

Most patients in the early part of the study were treated as inpatients, primarily because of the careful attention needed during initial study

---

The authors are with the Department of Neurology, University of Michigan Medical Center.

This study was supported in part by the Clinical Pharmacology Department and a grant from the USPHS, National Institute of General Medical Sciences, 5P11GM15559.

of a new drug. Later, it seemed reasonable and finally beneficial to treat them as outpatients. Currently, patients are admitted to the hospital only if they have severe medical problems or individual problems unrelated to Parkinson's disease or its treatment.

The first 100 patients were given numerous laboratory tests, most of which were performed twice weekly. These included electrocardiograms, chest X-rays, and other studies as indicated for particular medical problems encountered before initiating therapy with L-dopa. Routine studies also included a complete blood count with red blood cell indices and white blood cell differential counts, fasting and two-hour postprandial blood sugar, BUN, creatinine, SGOT, SGPT, alkaline phosphatase, bilirubin, total serum protein, cholesterol, uric acid, calcium, phosphorus, electrolytes, prothrombin time, PBI, complete urinalysis, stool guaiac, and Coomb's test. So few abnormalities were encountered that the laboratory tests have been reduced to the following: complete blood count including differential white cell count, creatinine or BUN, SGOT, alkaline phosphatase, and complete urinalysis, along with any others considered appropriate for the patient's general medical condition.

Method of Evaluation

Each patient's progress was recorded after a baseline evaluation was established by the patient's opinion of his disability and the physician's thorough neurologic examination. Progress was scored on a grading form which included evaluation of the severity of disease and the patient's overall performance in important activities of daily living as evaluated on the Northwestern Disability Scale. Based on these tests, the patients were categorized as having mild, moderate, or severe Parkinsonism.

Patients admitted to the hospital were evaluated daily. Outpatients were first seen weekly for six weeks. As we gained experience, the visits were reduced to once every two to four weeks. Our current program for treatment includes visits at one- or two-week intervals for three or four visits, and then once a month until it is deemed safe to decrease the visits to once every two or three months.

Initially attempts were made to reduce or eliminate anticholinergic and antihistaminic medications. Although there was no problem in eliminating drugs with primarily antihistaminic action, the reduction of anticholinergic drugs occasionally resulted in alarming exacerbation of Parkinson symptoms, thus demonstrating all too clearly that these drugs are still important in the treatment of Parkinsonism. Therefore, we do not withdraw any prior anti-Parkinson medication before beginning L-dopa therapy. The dosage of antihypertensive medications is often reduced, particularly reserpine, because of the risk of orthostatic hypotension. Vitamin supplements are discontinued unless there are specific indications for their use. Pyridoxine antagonizes the action of L-dopa. A few patients, however, have taken small amounts of Vitamin B_6 daily without noticeable detriment to the L-dopa therapy. Monoamine oxidase inhibitors may potentiate the actions of L-dopa and are relatively contraindicated.

Dosage Schedule

The treatment schedule is individualized. For relatively young and healthy adults without complicating medical disease, the starting dose may be as much as 500 mg. of L-dopa orally once a day and then raised by 500 mg. every five to seven days until a total daily dose of three gm. is attained. The patient is strongly advised not to take the medicine on an empty stomach, because this almost universally produces nausea. For older individuals, with or without complicating diseases, a very cautious approach is followed. These patients are usually started on doses as low as 100-200 mg. per day, and this dose may not be increased any faster than 200-250 mg. every two to four weeks. There is no need to achieve an arbitrary dose level nor to follow a prescribed incremental schedule. Most patients with Parkinsonism can achieve a daily dose of L-dopa which will give some improvement if the dosage and rate of increase are low. The need for reaching optimum dosage is not a medical emergency and rarely can even be considered urgent. Generally, the Parkinson syndrome has been present for many years, and a gradual return to normal daily activity is far better tolerated than a rapid reversal of symptoms. Major side effects are also much less common with this cautious approach. A suggested preliminary maintenance dose of three gm. is used only because it is a convenient point of reference; some patients do well on less than one gm. daily and a few require more than six gm. daily. Usually we have found it most practical to achieve a daily dose of three gm. and maintain it for about two months, then increasing the amount if no important side effects have developed and further improvement is needed. In hospitalized patients, who can be carefully monitored, the dose is usually increased by 500 mg. every two or three days until a total of three gm. daily is attained. This dose is maintained and subsequent adjustments are made as outpatients.

Results of Treatment

Eighty-six per cent of the patients beginning L-dopa therapy are continuing treatment. The

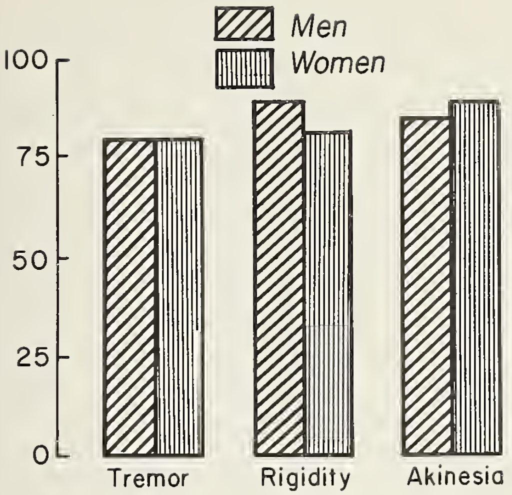


Fig. 1—This graph illustrates the per cent of patients with Parkinsonism experiencing **any** improvement.

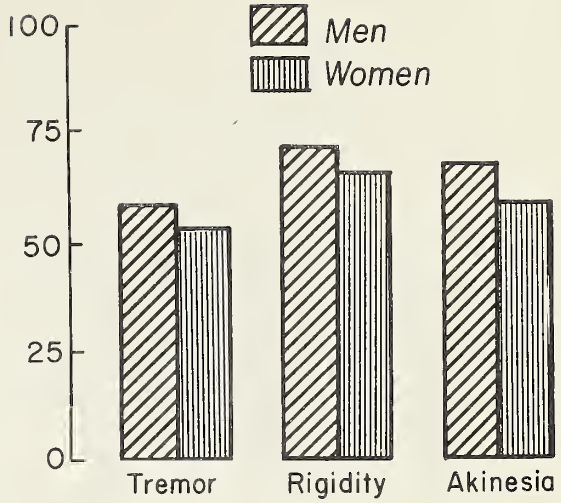


Fig. 2—This graph shows the per cent of patients experiencing **moderate to marked** improvement in the three major signs of Parkinson's disease.

overall beneficial response to therapy has been high. Seventy-five to 90 per cent of these patients showed improvements in one or more of the three major components of Parkinson's disease -- tremor, rigidity and akinesia (**Figures 1 and 2**). The response was not significantly different among patients who had had surgical treatment and those who had not. The improvement included all degrees from mild -- equivalent to that usually obtained with standard anticholinergic or antihistaminic medications -- to nearly total disappearance of Parkinson symptoms and signs. All components of Parkinsonism were improved by L-dopa. Significant diminution in tremor often lagged behind the improvement in akinesia and rigidity by several months. Although women patients with moderate or severe disease responded slightly less well, there was otherwise no difference in therapeutic effect related to sex.

The results do not reflect the effects of L-dopa alone, because most patients continued to receive anticholinergic of antihistaminic drugs. A number of patients who were on a stable dose of L-dopa securing optimum improvement were asked to discontinue anticholinergic and antihistaminic medications slowly. The majority of patients reported that they preferred to continue taking these, believing that the combination therapy was more effective than L-dopa alone. Some reported that although the L-dopa would do as well in larger amounts, continuing the anticholinergic medication allowed them to use less L-dopa and thus incur fewer side effects.

The earliest sustained improvement was noted by the second or third day in a few cases, with as little as 500 mg. of L-dopa each day. An equally small number showed no appreciable improvement until after five months of therapy, but then progressed to good or excellent results within a year. Most patients, however, showed improvement by the second or third week of treatment and reached maximal benefit by the end of the second to fourth month. At present, in cases where there is no apparent response, treatment is continued for at least six months.

Contrary to initial reports that L-dopa is most effective in mild Parkinsonism, we found that cases of moderate and severe disease improved at least as much, and occasionally more. **Figure 3** indicates that in moderate or severe Parkinsonism there was slightly less improvement in tremor but a proportionately greater decrease in rigidity and akinesia than in less severe disease. Patients with mild disease obviously achieved a more nearly normal status, subjectively and objectively, although the quantitative change in their condition may have been relatively small. Patients with severe disease frequently experienced greater improvement while receiving L-dopa, but did not approximate the normal state nearly as well.

Side Effects

Perhaps the most important findings to be derived from a large clinical trial of L-dopa are those that shed light on the side effects of this drug. These unwanted effects fall in four major categories.

Gastrointestinal symptoms after ingestion of L-dopa -- anorexia, nausea, and often vomiting -- were

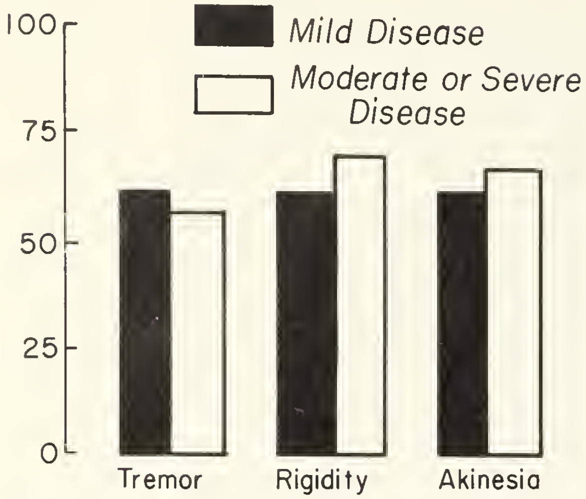


Fig. 3—The per cent of patients showing moderate or marked improvement is illustrated in terms of the severity of disease.

clearly the most frequent reactions, affecting 68 per cent of our patients, and twice as many women as men. Despite the relative frequency of these reactions, however, they led to cessation of treatment in only five per cent of patients. One patient, an 82-year-old man with mild Parkinsonism, experienced gastrointestinal bleeding from hemorrhagic gastritis, and a slight drop in hematocrit was noted. L-dopa therapy was discontinued and later was resumed with antacids added to the regimen. No further difficulty was encountered.

Several patients noted intolerance to some foods, most commonly coffee. A few patients could no longer eat butter or margarine and two complained that chocolate caused nausea.

Dyskinesia, which denotes adventitious abnormal movements anywhere in the body, occurred in 31 per cent of this series. The most subtle change was a widening of the palpebral fissures, giving the patient the appearance of being continuously astonished. More obvious changes included twitches of facial muscles, intermittent protrusion or flicking movements of the tongue, pursing and other movements of the lips, biting or chewing movements, hesitant speech or swallowing. Turning, jerking or other peculiar movements of the head or neck occurred. The fingers might twitch or the foot tap. Flailing or jerking movements of the arms and legs were noted, and repetitive and sometimes painful rhythmic contractions of abdominal and pectoral muscles. Speech might be rapid. Tachypnea and forced hyperventilation occurred. Sometimes there was generalized motor hyperactivity.

Complaints of muscle pain arose in several patients in association with dyskinesias. Aside from pain associated with excessive dyskinesias, the movements caused no serious problems with the exception of one patient who had severe bruxism with erosion of the teeth requiring a dental prosthesis similar to that worn by athletes to be inserted to prevent further erosion of the incisors.[8]

Such dyskinetic phenomena represent a central effect which can be counteracted slowly by giving 25 mg. of pyridoxine orally, or more promptly in severe cases by giving this dose intramuscularly. Mild dyskinesia was usually of no great concern to the patients. It was not possible to give daily doses of pyridoxine to minimize dyskinesias without counteracting the beneficial effects of L-dopa. We concluded that the total dose of L-dopa might as well be reduced. Thus, dyskinesia may be the prime limiting factor in therapy with L-dopa, since other side effects are usually less difficult to manage.

Adverse mental symptoms developed in 17% of the patients, with about equal frequency in men and women. Most commonly appearing were restlessness, irritability and anxiety; depression occurred but usually derived from the patient's unrealistically high expectations during the initial days of his therapy. Insomnia and, less frequently, hypersomnia have been seen. Hallucinations and delusions were experienced by patients with various other disorders of judgment as well as by other individuals having no other aberration in mental status. Psychotic states developed transiently in only three patients.

In patients with chronic neurologic disease it is often difficult to determine whether or not changes in mood, personality, and orientation result from the disease or from any given therapeutic agent. Analysis of the adverse mental symptoms in our patients suggests three possible bases: situational reaction, pre-existing psychiatric disease, and direct effect of L-dopa. Forty-three per cent of the cases of mental disturbance were considered the result of reaction to hospitalization. Some of these patients showed psychotic symptoms which disappeared after they were discharged from the hospital and returned to familiar surroundings, with no change in their L-dopa regimen. About 39 per cent of the patients with adverse mental symptoms had pre-existing psychologic problems, and the symptoms did not change appreciably during treatment. In only 18 per cent of the patients with abnormal mental symptoms -- that is, nine patients in the whole series -- did a direct effect of L-dopa seem likely. The reactions were not serious and it is reasonable to assume that even in this group a past history of difficulty in emotional adjustment to their disability would render them more susceptible to side effects of L-dopa as well as other medications.

The most frequent effect on emotional state was not adverse, but rather clearly positive, with alleviation of depression, sadness, and a generally hopeless outlook. Such symptoms abated as the patient perceived the therapeutic benefits of L-dopa.

Orthostatic hypotension was a side reaction in 16 per cent of the series, occurring about equally in men and women. If only those cases which were documented with determinations of lying and standing blood pressures were included, the percentage of patients with this reaction would be very small. We have also included those patients who gave a convincing history consistent with the problem. No serious sequelae resulted. This reaction occurs much less frequently when therapy is initiated with low dosage.

Several other problems occurred during therapy, possibly but not definitely caused by L-dopa. Two patients developed angina, neither having a history of cardiac disease. Treatment was stopped in one of these. Angina disappeared in the second with reduced dosage. Cardiac dysrhythmia appeared in two patients, with paroxysmal atrial fibrillation in one and premature ventricular contractions in the other. Both patients had a previous history of the same cardiac disorder. In one patient the medication was stopped because it was ineffective, and in the second, the medication was continued because the dysrhythmia disappeared within a few hours and did not reappear. In another patient with a history of two attacks of angina with myocardial infarction, angina again developed on mild exertion during therapy, along with documented orthostatic hypotension. Commensurate electro-cardiographic changes were noted but there was no elevation in muscle enzymes. The L-dopa was discontinued briefly and then therapy was reinstituted with a smaller amount -- 1.5 gm. daily -- without recurrence of cardiac symptoms.

Several patients have complained of insomnia. Others complained of a sedative effect from L-dopa but only occasionally did these complaints require any adjustment in dosage. A few patients complained of increased body warmth, with flushing, especially of the face, hyperhydrosis, tearing, abdominal cramping with or without diarrhea, and constipation. Several complained of rhinorrhea. Two patients experienced drooping of the jaw, requiring conscious effort to keep the mouth closed. In another, severe hypotonia developed in all four extremities. Most of these symptoms were transient, infrequently requiring adjustment in dose.

Reasons for Failure

Although side effects were frequent, they were usually easy to control and were not often reason for stopping treatment. Forty-two patients were dropped from therapy. Twenty-six stopped because they had experienced no improvement. Eight patients discontinued treatment because of mental changes. Two patients developed incapacitating orthostatic hypotension and another two discontinued L-dopa due to anorexia, nausea, and vomiting. Therapy was stopped in two other individuals because of progressive elevation of alkaline phosphatase. These laboratory values were abnormal prior to starting L-dopa and it was thought prudent to interrupt treatment even though L-dopa was not thought to have contributed to the abnormality. One patient stopped treatment because of dyskinesia and another halted therapy because his Parkinson symptoms continued to progress.

Discussion

The results of our study of the treatment of Parkinson's disease with L-dopa confirm the general impression that dosage levels should be increased gradually over a period of two to three months. It is clear that rapid increases in medication incur more frequent and severe reactions, with the result that patients are withdrawn from treatment. Many of these "treatment failures" might be prevented with slower incremental doses of L-dopa.

Effective maintenance doses vary greatly from one patient to another. Moreover, in any given case the individualized maintenance dosage does not necessarily become fixed at the optimum level—in time the doses tend to decrease, and it is not unusual for a patient's ultimate maintenance dosage to be lower than the amount required during initiation of therapy. Patients in whom side effects prevent their attaining an optimum therapeutic response should be treated with doses below the level of toxicity. Within several months these patients often experience significant improvement in their Parkinson symptoms.

The need for reduction of the dose of L-dopa is obvious whenever serious side effects are noted, and this may be in the first few days of treatment or after several months. Again the approach must be highly individualized, and in each case a search should be made for causes unrelated either to the Parkinson syndrome or the L-dopa regimen. In the absence of such causes, the peripheral side effects of the drug can usually be managed without great difficulty. For example, gastrointestinal side effects can be minimized by taking L-dopa with food and adding antacids and anti-emetic medications. The major problems arise when the toxicity is of central origin. With dyskinesia, for example, the side effects tend to persist, or to disappear and then recur, despite adjustments in the daily dose of L-dopa. In some cases the problem may be overcome by reducing the dose a full gram below the level of toxicity. Occasionally, it is helpful to add an anticholinergic medication to the patient's regimen. Some investigators have found that Amantadine is useful in itself and as an adjunct to L-dopa in cases where it is important to reduce the dose of L-dopa.[5,12]

It is well known that Parkinson patients experience worsening of their symptoms when subjected to physical or emotional stress. Occasionally patients who have experienced a sustained, beneficial response to L-dopa encounter deterioration in their clinical state. Effective treatment of the apparent progression of the disease in the absence of other obvious causes of stress requires reduction in dosage, because in some patients excessive doses of L-dopa may induce stress and subsequent worsening of symptoms. Thus, exacerbation of the disease process can represent either a side effect of L-dopa or a failure in treatment. When the distinction is not clear, a diagnostic trial of a reduction in dosage is indicated.

Daily variations in signs and symptoms of Parkinson's disease in many patients under treatment with L-dopa continues to be a vexing problem. In some cases each brief period of relief is followed by a period of exacerbation until the next dose of L-dopa is taken. More often, however, the patients report that late afternoon is the time of greatest difficulty in dose regulation. Some patients are able to achieve reasonable control by adopting a schedule of smaller and more frequent doses, but a few patients continue to show a vacillating response despite all attempts to make it uniform.

In general, the effectiveness of L-dopa in our series was comparable to that reported by others. Mones and his associates[10] reported that half of their patients experienced significant improvement in their activities of daily living. Klawans and Garvin[7] reported that 67.5 per cent of their patients showed greater than 50 per cent improvement; and that 40 per cent showed at least 76 per cent improvement. Yahr, et al,[13] and McDowell, et al,[9] also found that a majority of their patients improved to the degree of 50 per cent or more. In our series, significant improvement in all signs of Parkinson's disease was seen. This ranged from a low of 54 per cent of women experiencing moderate to marked improvement in tremor to 75 per cent of men with a similar degree of improvement in rigidity. Ninety per cent of the men experienced some degree of improvement in rigidity. Treatment failures occurred largely among patients with end-stage disease involving severe contractures, joint fusions, and profound dementia.

Our observations regarding side effects also agree with those reported by others. Side effects are relatively common but rarely serious; most patients are willing to accept such discomforts in exchange for relief from the more disabling aspects of Parkinsonism. The potential complications of L-dopa therapy may be serious whenever they tend to aggravate concomitant illness. Examples include hypotension in patients with occlusive cerebrovascular disease or cardiovascular disease, arrhythmias in patients with cardiac disease, and anorexia, nausea and vomiting in debilitated patients. In our series, there were no deaths attributable to therapy with L-dopa.

Summary

A clinical trial of L-dopa therapy has been carried out in 302 patients with Parkinson's disease. Fifty-nine per cent of the patients experienced moderate to marked improvement in tremor while 71 per cent had a similar improvement in rigidity. Significant reduction in akinesia occurred in 64 per cent of the series. The continuous dosage regimen varied from 750 mg. to six gm. daily, with an average of about three gm. Side effects occurred in four major categories: gastrointestinal irritation, dyskinesia of various types, orthostatic hypotension, and adverse psychiatric responses. Such effects together with treatment failure led to cessation of L-dopa therapy in 14 per cent of the series. In most cases, however, the side effects were dose related and easily managed; no deaths occurred as a result of therapy. There is evidence that long-term therapy at "low" doses of the drug can yield significant benefits for patients whose lack of response in the early phase of treatment might be mistakenly construed as a permanent failure. L-dopa is clearly the most effective drug for the treatment of Parkinson's disease, and its usefulness often can be enhanced by concomitant anticholinergic medication.

References

1. Andeń, N. E., Dahlström, A., Fuxe, K. and Larsson, K.: Further Evidence for the Presence of Nigro-neostriatal Dopamine Neurons in the Rat. *American Journal of Anatomy 116:* 329-333, 1965.
2. Cotzias, George C., Papavasiliou, Paul S. and Gellene, Rosemary: Modification of Parkinsonism—Chronic Treatment with L-Dopa. *New England Journal of Medicine 280:* 337-345, 1969.
3. Cotzias, G. C., Van Woert, M. H. and Schiffer, M.: Aromatic Amino Acids and Modification of Parkinsonism. *New England Journal of Medicine 276:* 374-379, 1967.
4. Ehringer, H. and Hornykiewicz, O.: Verteilung von Noradrenalin und Dopamin (3-Hydroxytyramin) im Gehirn des Menschen und ihr Verhalten bei Krankungen des Extrapyramidalen Systems. *Klin. Wchnschr. 38:* 1236-1239, 1960.

5. Godwin-Austin, R. B., Frears, C. C., Bergman, S., Parkes, J. D. and Knill-Jones, R. P.: Combined Treatment of Parkinsonism with L-Dopa and Amantadine. *Lancet 2:* 383-385, 1970.
6. Hornykiewicz, O.: Die topische Lokalisation und das Verhalten von Noradrenalin und Dopamin (3-Hydroxytyramin) in der Substantia nigra des normalen und Parkinson-kranken Menschen. *Wien klin. Wchnschr. 75:* 309-312, 1963.
7. Klawans, Harold L., Jr. and Garvin, John S.: Treatment of Parkinsonism with L-dopa (Study of 105 Patients). *Diseases of Nervous System 30:* 737-746, 1969.
8. Magee, K. R.: Bruxism Related to Levodopa Therapy. *Journal of the American Medical Association 214:* 147, 1970.
9. McDowell, Fletcher, Lee, John E., Swift, Thomas, Sweet, Richard D., Ogsbury, James S. and Kessler, Jeffrey T.: Treatment of Parkinson's Syndrome with L-Dihydroxyphenylalamine (Levodopa). *Annals of Internal Medicine 72:* 29-35, 1970.
10. Mones, Robert J., Elizan, Terista S. and Siegel, George J.: Evaluation of Therapy in Parkinson's Disease. *New York State Journal of Medicine 70:* 2309-2318, 1970.
11. Poirer, L. J. and Sourkes, T. L.: Influence of the Substantia Nigra on the Catecholamine Content of the Striatum. *Brain 88:* 181-192, 1965.
12. Schwab, Robert S., England, Albert C., Poskanzer, David C. and Young, Robert R.: Amantadine in the Treatment of Parkinson's Disease. *Journal of the American Medical Association 208:* 1168-1170, 1969.
13. Yahr, Melvin D., Duvoisin, Roger C., Schear, Myrna J., Barrett, Robert E. and Hoehn, Margaret M.: Treatment of Parkinsonism with Levodopa. *Archives of Neurology 21:* 343-354, 1969.

Muskegon, 3 WSU Students Enter into Contract; Other Cities Interested

By Deanna Popoff
Lansing

A new approach has been developed in Michigan by several Wayne State medical students to help finance the education of medical students and also help Michigan towns get new doctors.

This plan brings together medical students from WSU in need of financial assistance and Michigan towns in need of family doctors. The voluntary agreement between the student and the city will enable the city to help finance a student's training in return for one or more years of the young doctor's service.

Wayne State Medical Student Council president, Sol Edelstein, and student-faculty representative, Douglas Jackson, saw the possibilities for this plan at the MSMS Annual Scientific Session in Detroit in the fall of 1970. MSMS had provided a booth for the Jaycees of Belding. Belding was proposing to finance a medical student's education in return for a year of the doctor's practice.

Medical Students Edelstein and Jackson obtained a list from the Michigan Health Council of the communities seeking doctors and they started a letter campaign introducing a financial aid plan for qualified medical students to the 134 cities listed in the MHC Doctor Placement Bureau. This student project had the approval, encouragement, and the moral support of the WSU School of Medicine administration.

As the numbers of interested Wayne medical students increased, Edelstein and Jackson asked representatives of two interested cities, Muskegon and Niles, to come to Wayne's medical school to give a presentation about their communities. City representatives then invited medical students to visit their city.

Several other Michigan cities including Allegan, Cass City, Fremont, Laingsburg, Mount Pleasant, Newaygo, Petoskey, and St. Johns have expressed an interest in the financial plan in letters to Edelstein and Jackson in the spring of 1971. Most of the interested cities plan interviews at Wayne State this fall.

At this time, Muskegon has accepted three student applications. Two senior students and one junior student have agreed with the Family Practice Associates and the Muskegon County Medical Society to practice with the Family Practice Associates of Muskegon in 1975, upon completion of medical school and post medical school training. The Muskegon plan provides a loan of $5,000.00 a year to each medical student. This loan amounts to a $1,500.00 government loan, interest-free, from the Muskegon Federal Savings and Loan Association and a $3,500.00 loan guaranteed for three years from the Hackley Union National Bank and Trust Company by the Muskegon County Medical Foundation with the interest paid by the Muskegon Family Practice Associates.

The students have agreed to practice family medicine in Muskegon for a minimum of one year. Each of the students must repay each loan excluding the interest payments. If the student for any reason decides later not to go to Muskegon, he must pay the loan at usual interest.

Plans for financing WSU medical students vary in Michigan. The community of Fremont has an active interest in the Wayne State University School of Medicine finance plan. Fremont leaders propose a flexible plan making funds available for a yearly amount to be repaid to the community or as an outright grant from community funds.

Petoskey, also looking for family doctors for the near future, plans to finance a student's training through loans from the Lockwood McDonel Hospital loan funds.

Currently, the obstacle of the military draft for male students is being countered by efforts to have passed in Congress a Health Manpower bill with an amendment which would allow medical students exemption from the military draft. Senator Robert Griffin of Michigan introduced this amendment to the Senate Health Manpower bill as an alternative allowing medical students to practice medicine for four years in communities and ghetto areas in dire need of physicians. Mr. Edelstein is actively promoting this legislation.

Robert Oakes, MD, of Harbor Beach, and legislative chairman of the Michigan Academy of General Practice, reports that the Michigan Academy of General Practice is happy and honored that the students have asked for assistance with this federal legislation to help relieve physician distribution problems. Other organizations supporting this new approach to change the military draft status of new doctors and dentists are the Selective Service, the American Association of Medical Colleges, the American Academy of General Practice, the American Dental Association, and the American College of Dentists.

This article was written by Deanna Popoff, Lansing freelance writer, for *Michigan Medicine.*

Charles Shepard, MD

Rich GR Medical History Began in 1835

BY SUE LUDWIG
EAST LANSING

Grand Rapids, site of the MSMS annual Scientific Session, is what *New York Times* reporters automatically label "Middle America." Twice designated as an All-American City, it exudes an aura of solidity and neatness, still influenced by the mores of the Dutch who settled here in great numbers in the 1850's.

But its history, like that of most cities in this New World, has had its share of roughness and flinty individualism, and medicine shared its struggles.

More than a century ago, in 1835, a 23-year-old doctor, Charles Shepard, arrived in the small community of 20 families. On the way, he had inoculated Chief Hazy Cloud and a band of 150 Indians with the new vaccine against smallpox.

Charles Shepard, Pioneer Doctor

The village's first two doctors, both graduates of Fairfield Medical College in New York state, both held additional jobs during their first year in Grand Rapids. Dr. Stephen Wilson was a court clerk and Dr. Shepard, a surveyor.

The two men were partners, but Wilson's life was cut short by typhoid fever only four years after his arrival. Dr. Shepard died at age 81; for some time he was the only physician within a hundred miles. He began to specialize in obstetrics and women's diseases, delivering more than 5,000 babies in his career. In 1878 he performed the ninth ovariotomy in the country. A president of the State Medical Society in 1886, he also served as a village trustee, an alderman, and mayor. His activity in community affairs was typical of mid-nineteenth century doctors.

Dr. Shepard had arrived in the village of Grand Rapids only eight years after its first settler, Louis Campau, established a trading post there. The settlers were either healthy or stoic, more probably both. A letter dated 1836 commented, "I have not heard of a single case of sickness for ten months past, and we never have any other disease than fever and ague at any time."

Fees adopted by the Grand River Valley Medical Society in 1852 indicated the most prevalent medical problems and reveal both the violence of that time and the reasons why doctors still "moonlighted":

For attendance in obstetrics, natural labor	$5.00
For unnatural labor—optional	
For reducing dislocated hip or shoulder	5-10.00
For reducing elbow, wrist, or ankle	3- 5.00
For setting simple fracture of leg	10.00
For gonorrhea, pay in advance	5.00
For visit made less than a mile (single)	1.00
For day's attendance	1.00
Out of town prescription $1.00. Traveling fees two shillings per mile to or from the patient.	
For visit in consultation	2.00
For amputation of arm or leg	25.00
For prescription at the office	.50
For bleeding at the arm	.50
For vaccination	.50
For extracting tooth	.25
For treatment and care of syphilis	10.00

Medical Strides

In 1850 the village became a city. During that decade, the population swelled to more than 7,000. Streets and stores began to be lighted with gas. The telegraph and the railroad came.

The half-century from 1850 to 1900 was significant for the development of medicine. Two physicians added a dynamic element to the city. In 1868 Dr. Frances Rutherford arrived. A graduate of the Woman's Medical College in Philadelphia, she became the first female physician in the U.S. to be appointed a city physician—at the age of 28. Two years later she was among the first three women accepted into the State Medical Society. She was elected a vice-president the following year.

Dr. Rutherford enjoyed a thriving practice in the city, and also went abroad to visit hospitals and clinics. She was instrumental in establishing a training school for nurses.

Two years after Dr. Rutherford's arrival another remarkable medical person came to Grand Rapids. Destined to be a pioneer in the field of radiology, Henry Hulst seemed a copy of the uni-

---

Mrs. Ludwig is an experienced writer and editor, and formerly was associated with Michigan State University.

versal Renaissance man, whose knowledge and interests spanned many areas.

Born in the Netherlands, he came to this country as a youngster, and received two degrees from Hope College in the 1880's. He then studied theology at Princeton for two years, and obtained his MD from the University of Michigan. After serving as assistant physician at the Traverse City State Hospital, he came to Grand Rapids. He was visiting obstetrician at Union Benevolent Association Hospital for one year, but his chosen field was neuropsychiatry. In 1902, he reported to the American Roentgen Ray Society that he had roentgenograms of the lungs taken in one, one-half, and one-fourth second, without using intensifying screens. They were the first made in this country. This remarkable man died in 1949 at the age of 90.

Diseases and Cures

The scattered pioneers of the early days were proud of their good health, but the more crowded conditions of city life brought "modern" illnesses—diphtheria, scarlet fever, cholera and whooping cough. Unsewered districts and infected well water led to a typhoid outbreak in 1912, and it was only in 1937 that this disease ceased to be a problem. Venereal diseases were combated by a Social Purity Committee established in 1907, but in spite of public health measures, new drugs, and education attempts, the committee's goal was never reached.

Two significant strides in the battle against disease originated in Grand Rapids. In 1905 the Grand Rapids Anti-Tuberculosis Society was formed, the first of its kind in the state. It worked for an "anti-spitting ordinance," passed the next year. In 1905 the city health officer. Dr. Thomas M. Koon, began a "fresh-air" treatment with one patient, in a tent on a farm. The man's recovery encouraged Anti-Tuberculosis efforts, and two years later the city opened the first municipally-owned TB sanitorium in the U.S.

Another, more recent contribution to the fight against diseases began just a few years later at Sunshine Hospital. Dr. Pearl Kendrick was made director of a laboratory there, and became interested in whooping cough, then a potent killer of Michigan children. In the fall of 1932 she and her staff began collecting cultures from whooping cough patients, to be used as diagnostic aids and the basis for vaccine preparation. In 1934 a small field study was begun in Grand Rapids and the result was a dramatic one-to-seven ratio between vaccinated and non-vaccinated children. A third series combined vaccine with diphtheria toxoid, the beginning of modern combined inoculations. Dr. Kendrick, with her co-worker Dr. Grace Eldering, also developed the mouse potency test as a standard for pertussis vaccines, a standard later required by the National Institute of Health.

Hospitals

Hospital care for illness began in 1886 with the completion of the Union Benevolent Association Home and Hospital, built at a cost of $31,707. Thirty years later Dr. Charles Shepard, the pioneer doctor, was appointed chief of staff at age 78. By 1916, the hospital was housed in a new building, the second largest in Grand Rapids, with five stories and 125 beds. It was renamed Blodgett Memorial Hospital. Today it is a well-equipped, well-staffed 400-bed hospital.

Butterworth Hospital, the city's largest, evolved as did most of the early hospitals from the charity of a ladies' church group. The women of St. Mark's founded the St. Mark's Church home, which housed six elderly women during its first year. Later, a larger building was utilized both as home and hospital and in 15 years had admitted more than 2,500 persons. By 1894 it had ceased care of the aged and was no longer sectarian. Through a series of moves, and endowments, it became the city's largest hospital with a current capacity of more than 450 beds.

St. Mary's Hospital was established in a small house tended by three Sisters of Mercy, who provided not only nursing, but the housework and janitorial services. Ward prices were $1.00 a day, and private rooms ran ten to twenty dollars a week. The total net profit at the end of the first year of operation was 65 cents. Today the hospital has a capacity of 370 beds and its adjunct School of Nursing has graduated more than 2,000 students.

Medicine and Mankind

The history of Grand Rapids medicine is not so different from that of many cities in this land. Nineteenth century medicine had its share of quacks, its struggles with the skeptics, its breakthroughs, and the dogged determination of physicians who wanted to improve the health of their fellow man. Behind the anachronisms and the quaint phrasing, then, were real people, and their age seemed as complex to them as ours does to us.

Dr. Colfax Schuyler Graves worried: "We have to record, as a result of the hurry and worry, the crowding into a day of the work which physiologically demands two, three or four days and by which our professional men and merchants overtax their strained and already overwrought brains, the greatest prevalence, relatively, of all forms of dissease of the mind and nervous system."

This was in 1890.

God bless them all.

Like William Faulkner's Dilsey, they endured.

Halothane, Methoxyflurane and Hepatic Necrosis

Jay M. McDonald, MD
Song H. Nam, MD
A. R. W. Climie, MD
Detroit

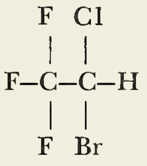
Abstract

Two cases are described to illustrate hepatotoxic potential of halothane and methoxyflurane. Important clinical features include unexplained postoperative fever followed by jaundice and evidence of parenchymal damage which frequently progresses to complete hepatic failure and death. In over 50% of cases of halothane-induced hepatic failure there has been known prior exposure to halothane.

This, together with other evidence, suggests that the drugs act by a hypersensitivity mechanism. Therapy is of little avail in massive hepatic necrosis so prophylaxis is important. This can be accomplished by preoperative determination of the nature of prior anesthetics and by restricting the use of halothane and methoxyflurane to primary operations of a serious nature. As old medical records may be inaccessible, patients should be informed whenever either anesthetic has been used and instructed to alert the surgeon or anesthesiologist when future surgery is contemplated.

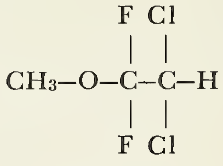
Massive hepatic necrosis following halothane (Fluothane) anesthesia has been described frequently in the past 12 years. Halothane is a halogenated hydrocarbon and, because of the well-known toxic effects of other halogenated hydrocarbons, this compound was subjected to very critical analysis prior to its introduction in 1956. In spite of this, the first case of hepatic necrosis following halothane anesthesia was reported less than two years later in 1958.[1] The National Halothane study, reported in 1966, concluded that this was a safe anesthetic agent,[2] yet since then an increasing number of cases of hepatic necrosis secondary to halothane anesthesia have appeared in the literature.[3-11]

Methoxyflurane (Penthrane), a structural relative of halothane, was introduced three years later than halothane in 1959. The first case of methoxyflurane associated with hepatic necrosis was reported in 1963[12] and since then a number of additional cases have been described.[9,13-18] The anesthetic has also been linked with renal toxicity.[18-20]



$$\begin{array}{c} \text{F}\quad\text{Cl} \\ |\quad\ | \\ \text{F–C–C–H} \\ |\quad\ | \\ \text{F}\quad\text{Br} \end{array}$$

Halothane



$$\begin{array}{r} \text{F}\quad\text{Cl} \\ |\quad\ | \\ \text{CH}_3\text{–O–C–C–H} \\ |\quad\ | \\ \text{F}\quad\text{Cl} \end{array}$$

Methoxyflurane

This report was suggested by the occurrence of two fatal cases of hepatic necrosis within a few months of each other. One followed halothane and the other methoxyflurane anesthesia. While the value of both agents as anesthetics is unquestioned, physicians should be acutely aware that serious complications may occur and should refrain from indiscriminate use of these drugs.

Case Reports

Case 1

The patient was a 59-year-old Negro woman who had been followed for two years with recurrent symptoms and signs of left pyelonephritis. In addition she had a long history of hypertension. Prior operations included a hysterectomy, appendectomy and a left ureterolithotomy 13 years earlier. There was no previous history of jaundice, liver disease, drug abuse, alcoholism, or gallbladder disease. Studies prior to admission included an intravenous pyelogram and isotope renogram

---

Doctors McDonald and Nam are residents in pathology at Wayne State University School of Medicine and affiliated hospitals, while Doctor Climie is a pathologist at Harper Hospital and assistant professor of pathology at Wayne State University School of Medicine.

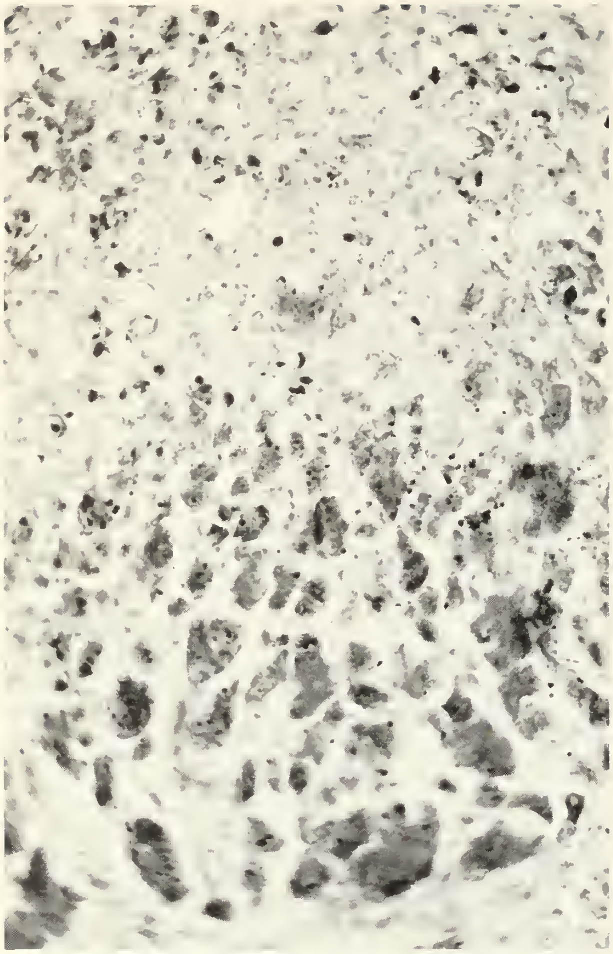


Fig. 1. Island of liver cells adjacent to necrotic and collapsed zone (H & E X 200).

which showed an atrophic left kidney with severely impaired function. At the time of admission to Harper Hospital on June 28, 1970 there were no remarkable physical findings.

On June 29, 1970 a left nephrectomy was performed under halothane, thiopental and nitrous oxide anesthesia. She received two units of whole blood at this time. On the third post-operative day a temperature of 102°F developed and was thought to be secondary to a wound infection. She became afebrile on the ninth post-operative day without the use of antibiotics.

Two days later the wound dehisced and was repaired surgically, again under halothane and nitrous oxide anesthesia. Immediately following the second operation her temperature rose to 102°F and remained elevated despite antibiotic therapy, first with cephalothin and later with cephaloridine and ampicillin. On July 21, 1970, the tenth day after re-operation, icterus was noticed for the first time. When the serum bilirubin was determined it proved to be 17 mg% (9.37 mg% direct). Serum glutamic oxalacetic transaminase was 3,200 units, glutamic pyruvic transaminase 930 units and lactic dehydrogenase 1,620 units (normal < 350 units). Leukocyte count was 17,100 per cu mm with 43% segmented neutrophils, 2% band forms, 46% lymphocytes, 7% monocytes, 1% eosinophils, and 1% basophils. Prothrombin time was 20.1 seconds (control 13.6 seconds), and the alkaline phosphatase was normal.

From that point her condition progressively deteriorated, first with worsening liver function and subsequently with oliguria and uremia. An episode of gastrointestinal hemorrhage was controlled by conservative methods, and later in her course an attempt at hemodialysis was made. On July 29, 1970 the leukocyte count was 27,300 per cu mm with a moderate left shift. Prothrombin time was 24.1 seconds (control 13.5 seconds), total bilirubin was 25.0 mg% (15.6 mg% direct) and alkaline phosphatase was 38.0 King-Armstrong units. Cephalin flocculation was 4 plus, SGOT 1,140 units, SGPT 120 units, LDH 1,950 units, BUN 86 mg% and creatinine 10.4 mg%. The patient was comatose for the last three days and died on August 1, 1970 without any improvement in liver or renal function.

Autopsy Findings

Pertinent findings included bilateral diffuse bronchopneumonia and numerous small superficial gastric ulcers to which the gastrointestinal bleeding was attributed. The most striking feature was the liver which weighed 1,250 grams. The capsule was smooth but the parenchyma was mottled, brownish-black, soft and flabby and had a gel-like consistency. Microscopically there was almost total loss of architecture due to nearly complete necrosis of the parenchyma. **(Figure 1)** The few remaining hepatic cells were isolated by areas of complete necrosis and hemorrhage. Inflammatory reaction was minor and consisted of a few mononuclear cells, neutrophils and eosinophils. The right kidney showed evidence of acute tubular necrosis.

Case 2

A 48-year-old Negro woman was admitted to Harper Hospital on December 3, 1970 because of discharge from both ears and diminution of hearing for two years. A hysterectomy and bilateral salpingo-oophorectomy had been performed under cyclopropane anesthesia in 1964. Physical examination on admission revealed perforation of both tympanic membranes. Other physical findings and laboratory data were within normal limits. A right radical mastoidectomy was performed on December 3, 1970 with methoxyflurane as the primary maintenance anesthetic agent. (Thiopental was used for induction and nitrous oxide as a secondary maintenance agent.) No blood was transfused, there were no complications during or after the operation and the patient was discharged on December 5, 1970 in good condition.

She returned to Harper Hospital on December 28, 1970 complaining of loss of appetite, nausea, weakness and weight loss of five pounds, all beginning four days after the mastoidectomy. She denied any vomiting, fever or night sweats. Physical examination revealed an obese, deeply jaundiced Negro woman with blood pressure of 116/86 mm Hg and temperature of 97.4°F. The liver and spleen were not palpable and the remainder of the examination was not remarkable. Abnormal laboratory findings included a total serum bilirubin of 18.8 mg% (direct 9.95 mg%) and a prothrombin time of 27.0 seconds (control 12.0 seconds). Serum glutamic oxalacetic transaminase (SGOT) was 1,560 units and alkaline phosphatase was 78 King-Armstrong units. Total protein was 7.8 grams with 3.4 grams albumin and 4.4 grams globulin. Blood urea nitrogen was 7 mg%. Blood glucose was 164 mg%. Urinalysis revealed a trace of albumin and 30-50 WBC per high power field with a specific gravity of 1.008. Leukocyte count was 11,500 per cu mm with a differential count of 70% segmented neutrophils, 8% band forms, 14% lymphocytes, 6% monocytes, 1% eosinophils and 1% basophils.

Treatment consisted of methylprednisolone 250 mg IV q.6.h., neomycin 1.0 gm q.i.d. IM, Vitamin K 10 mg IM and a high protein and carbohydrate diet. Jaundice and nausea persisted and on January 4, 1971 the patient became lethargic and confused. At this time total bilirubin was 29.5 mg% (direct 17.0 mg%). Serum ammonia was 193 mg% and BUN 11 mg%. Prothrombin time was 24.8 seconds (control 13.3 seconds). Her temperature remained normal until the day before death when it reached 100.2°F. On January 7, 1971 the patient lapsed into deep coma and died.

Autopsy Findings

At autopsy the liver weighed 770 grams. The capsule was wrinkled and yellowish-gray. The parenchyma was soft and flabby and was diffusely granular to nodular. These nodules varied in size, but averaged 4 mm in diameter and were orange-yellow. (**Figure 2**) Microscopically there was massive hepatocellular necrosis with only a few islands of surviving hepatocytes and bile ducts. Inflammatory reaction to the necrosis was sparse and consisted of lymphocytes, plasma cells and neutrophils. In the kidney, many of the dilated collecting tubules were filled with bile stained casts. There were patchy areas of pulmonary edema. The remainder of the organs were normal in both gross and microscopic appearances.

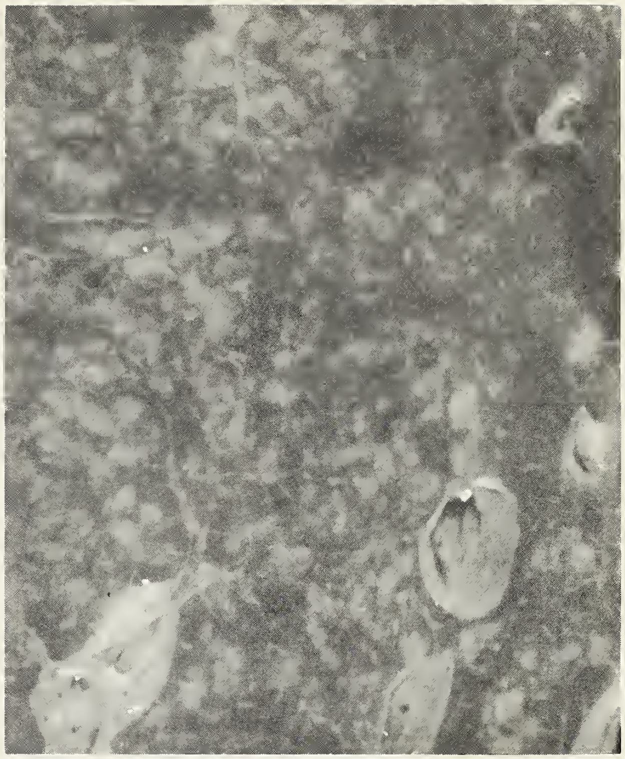


Fig. 2. Nodular appearance of cut surface of liver.

Discussion

Clinical and Pathologic Features

The incidence of fulminant hepatic failure following halothane anesthesia is low, ranging from one per 5,000 to one per 15,000 random halothane anesthesias with one per 10,000 being the most acceptable figure. [2,21,22] On the other hand, halothane anesthesia is associated with about 25% of all cases of fulminant hepatic necrosis thus ranking second only to viral hepatitis as an etiologic factor.[3,9] Hepatic dysfunction due to lesser degrees of necrosis following halothane administration is probably much more common than the widely publicized fulminant form.[4,7,23] In the National Halothane study in 1966 only fatal cases with massive necrosis were examined in depth but there were approximately three times as many cases with lesser degrees of necrosis.[2,24] Thus, although the mortality from this syndrome is low, the morbidity is much higher. Like viral hepatitis, there appears to be an entire spectrum of disease ranging from very mild to fatal.

It is important to recognize the similarities and differences, both clinical and pathologic, between halothane hepatic dysfunction and viral hepatitis. Unexplained post-operative fever following halothane anesthesia is the single most important clinical feature.[9,10]

Almost all major surgical procedures are followed by a brief and minor fever, but a second, unexplained, febrile episode or a persistent, unexplained elevation of temperature should alert one to the possibility of this syndrome.[8] Klion et al have stressed the fact that the latent period between exposure and onset of fever becomes shorter with each successive exposure to halothane,[7] but this does not appear to be a significant enough feature to aid in the diagnosis.[11]

The onset of fever is usually within 14 days of exposure and precedes the icteric phase by about 48 hours.[11,23] The remainder of the syndrome is typical of fulminant hepatic failure from any cause and is marked by laboratory evidence of parenchymal damage including elevation of the serum transaminase and bilirubin. The prothrombin time is prolonged and there is a mild to moderate increase in the leukocyte count. In 60-80% of the fulminant cases the patient lapses into coma and subsequently dies.[3,7] Some observers have noted that a peripheral eosinophilia is common,[7,11] but others have not found this to be a reliable diagnostic feature.[9]

Fifty to 95 per cent of cases of halothane hepatic failure occur after multiple exposures to halothane, and in most instances the time between the final two exposures has been less than 60 days.[3,19] There are cases on record, however, in which the time between the last two exposures has been greater than one year.[7] Analysis in retrospect has shown that the exposure or exposures prior to the final one have often been followed by unexplained febrile episodes thought to be due to mild degrees of hepatic damage.[3,9] Any unexplained febrile episode following halothane anesthesia should alert one to the possibility of fulminant hepatic failure after any subsequent exposure to halothane.

By light microscopy the hepatic necrosis secondary to halothane is indistinguishable from that caused by severe viral hepatitis.[5,9,24,25] Subtle differences have been pointed out such as the presence of fatty degeneration, occasional granulomatous inflammation and increased eosinophils in the inflammatory exudate in cases of halothane hepatic necrosis, but these are non-specific findings.[7,10,23,26] Under the electron microscope, the mitochondria are normal in viral hepatitis but in halothane damaged parenchymal cells they show segmental loss of the outer layer and shortening of the cristae with infolding of the inner membrane.[5,7] This damage may be related to circulating anti-mitochondrial antibodies which have been found in cases of halothane hepatic failure but not in viral hepatitis.[7,27] Uzunalimoglu, et al, have recently described other more subtle ultramicroscopic differences between these two diseases.[5]

Hepatic toxicity due to methoxyflurane has not been as well documented as that due to halothane. At least seven of the 10 cases so far described have been fatal,[9,12,13,15,17,18] four have been associated with concomitant renal damage,[9,16,18] two with a peripheral eosinophilia[14,15] and one with a vesicular cutaneous rash.[15] One of these cases had previously been exposed to halothane anesthesia and at that time had demonstrated mild signs and symptoms of liver dysfunction.[12] Fever has been a feature of methoxyflurane hepatic toxicity in half the cases. In addition to hepatic hazards, methoxyflurane in some patients has proved exclusively toxic to the kidneys with development of renal failure. In these cases renal tubular damage and azotemia are apparently caused by blockage of renal tubules by crystals, possibly of calcium oxalate, although actual structural damage to the epithelium is not severe. As some of these patients have also received tetracycline it has been suggested that renal toxicity may only occur when a patient receives both drugs.[20] This concept, however, has not been accepted by all.[18]

Etiology

In evaluating the hepato-toxicity of an anesthetic agent several factors must be considered.[28] These include the depth and duration of anesthesia, and the occurrence of hypoxia, hypercapnia and hypotension during the operation. In addition, nutritional status, site of surgery and transfusions, with the risk of hepatitis, are of importance. The pathogenesis of liver damage after halothane or methoxyflurane anesthesia is unknown but four possible etiologic mechanisms have been proposed:[15]

1. Direct toxic effect of the drug
2. Coincidental viral hepatitis
3. Activation of a latent virus by the drug
4. A drug-induced hypersensitivity phenomenon

Coincidental viral hepatitis cannot completely be excluded especially if transfusions have been given. However, as in our first case, most of the reports indicate that the interval between transfusion and hepatic necrosis is too short for classical long incubation (SH) hepatitis. At present there is no certain way to eliminate activation of a latent virus by the drugs but it seems unlikely.

Available evidence suggests that halothane does not act on the liver by a direct toxic effect such as seen with chloroform and carbon tetrachloride but rather by a hypersensitivity mechanism.[5,6,8,26-29] Although the evidence for hypersensitivity is not as extensive for methoxyflurane, the close clinical similarity of the two agents suggests that their effect on the liver may be mediated in the same manner. Taves, et al, however, have suggested that the renal toxicity of methoxyflurane may be due to elevated levels of inorganic fluoride and that the liver may concurrently be affected.[30]

Support for the concept of a hypersensitivity reaction in patients with halothane hepatic dysfunction comes from the fact that they often have a history of other allergic phenomena such as drug rashes and peripheral eosinophilia. The circulating anti-mitochondrial antibodies found in this syndrome are also found in cases of hepatic damage caused by drugs which are known to work via a hypersensitivity mechanism.[27] In addition, the frequency and amount of liver damage is entirely unrelated to dose, the lesion cannot be reproduced in experimental animals, the latency period is variable and the incidence increases with multiple exposures, all factors suggesting hypersensitivity. Furthermore, in two patients, Klatskin and Kimberg[29] and Belfrage, et al,[31] were able to reproduce hepatic dysfunction in the laboratory with small doses of halothane after they had previously been sensitized to it.

Therapy and Prophylaxis

As with all cases of fulminant hepatic failure, therapy is inadequate and the recovery rate is low. Little but supportive measures are available. Taves, et al, have suggested that hemodialysis to remove metabolites may be of value in patients with renal failure following exposure to methoxyflurane.[32] However, in most cases of hepatic toxicity the interval between exposure and diagnosis is sufficient to suggest that toxic metabolites of the drug would no longer be present in circulation.

At the present time it would appear that most efforts should be directed to prophylaxis. Multiple exposures to halothane, and probably methoxyflurane, should be avoided, at least within a short period of time. Lomanto and Howland[4] have set this period at 90 days but because of the anamnestic reactions common to hypersensitivity states it might be questioned if either drug should ever be given a second time. Nor can the possibility be discounted that in susceptible individuals administration of one agent may result in sensitization to the other.

An unexplained fever or evidence of hepatic dysfunction following a prior exposure to halothane or methoxyflurane should be an absolute contraindication to their future use. Since halothane is preferred by many anesthesiologists for major surgical procedures, it should be avoided in minor operations, especially those such as cystoscopy or dilatation and curettage which are often followed by major surgery. Both agents should be avoided in the first of two stage operations.

In addition anesthesiologists and surgeons should review records and take careful preoperative histories to elicit information on previous anesthetic agents and postoperative courses. As old medical records may be inaccessible it would be appropriate to provide each patient who receives halothane or methoxyflurane with a card stating this fact with instructions to show it to the anesthesiologist prior to a subsequent operation.

Hepatic dysfunction due to halothane or methoxyflurane probably forms an entire spectrum of disease from mild to severe and it is important to study anicteric or occult forms in order to evaluate the incidence and to avoid fatal re-exposure. More thorough study of circulating anti-mitochondrial antibodies should be undertaken to determine whether or not they have any prognostic value in screening previously sensitized individuals.

References

1. Virtue, R. W. and Payne, K. W.: "Postoperative Death after Fluothane." *Anesthesiology,* 19:562-563, 1958.
2. Subcommittee on the National Halothane Study of the Committee on Anesthesia National Academy of Science—National Research Council: "Summary of the National Halothane Study. Possible Association between Halothane Anesthesia and Postoperative Hepatic Necrosis." *JAMA,* 197:775-788, 1966.
3. Trey, C., Lipworth, L., Chalmers, T. C., et al: "Fulminant Hepatic Failure—Presumable Contribution of Halothane." *New Eng J Med,* 279:798-801, 1968.
4. Lomanto, C. and Howland, W. S.: "Problems in Diagnosing Halothane Hepatitis." *JAMA,* 214: 1257-1261, 1970.
5. Uzunalimoglu, B., Yardley, J. H. and Boitnott, J. K.: "The Liver in Mild Halothane Hepatitis." *Amer J Path,* 61:457-470, 1970.
6. Wilkinson, C. J.: "Postanesthetic Hepatic Dysfunction." *Arch Surg,* 101:359-362, 1970.
7. Klion, F. M., Schaffner, F. and Popper, H.: "Hepatitis After Exposure to Halothane." *Ann Intern Med,* 71:467-477, 1969.
8. Aach, R., Wessler, S., Avioli, L. V.: "Halothane and Liver Failure." *JAMA,* 211:2145-2147, 1970.
9. Trey, C., Lipworth, L. Davidson, C. S.: "The Clinical Syndrome of Halothane Hepatitis." *Anesth Analg,* 48:1033-1042, 1969.
10. Peters, R. L., Edmondson, H. A., Reynolds, T. B., et al: "Hepatic Necrosis Associated with Halothane Anesthesia." *Amer J Med,* 47:748-764, 1969.
11. Klatskin G. in Fink, B. R. (Ed): *Toxicity of Anesthetics,* Baltimore: Williams and Wilkins, Co., 1968, pp. 159-175.
12. Lindenbaum, J. and Leifer, E.: "Hepatic Necrosis Associated with Halothane Anesthesia." *New Eng J Med,* 268:525-534, 1963.
13. Durkin, M. G., Brick, I. B., Schreiner, G. W.: "Fatal Hepatic Necrosis Following Penthrane Anesthesia." *Gastroenterology,* 50:420, 1966.

14. Klein, N. C., Jeffers, G. H.: "Hepatotoxicity After Methoxyflurane." *JAMA,* 197:1037-1039, 1966.
15. Lischner, M. W., MacNabb, G. M., Galambos, J. T.: "Fatal Hepatic Necrosis Following Surgery (Possible Relation to Methoxyflurane Anesthesia)," *Arch Intern Med,* 120:725-728, 1967.
16. Elkington, S. G., Goffinet, J. A., Conn, H. O.: "Renal and Hepatic Injury Associated with Methoxyflurane Anesthesia." *Ann Intern Med,* 69:1229-1236, 1968.
17. Kataoka, Y.: "Liver Necrosis after Methoxyflurane Anesthesia." *Jap J Anesth,* 14:1158-1162, 1965.
18. Panner, B. J., Freeman, R. B., Roth-Mayo, L. A., et al: "Toxicity Following Methoxyflurane Anesthesia I. Clinical and Pathological Observations in Two Fatal Cases." *JAMA,* 214:86-90, 1970.
19. Crandell, W. B., Pappas, S. G., MacDonald, A.: "Nephrotoxicity Associated with Methoxyflurane Anesthesia." *Anesthesiology,* 27:591-607, 1966.
20. Kuzucu, E. Y.: "Methoxyflurane, Tetracycline and Renal Failure." *JAMA,* 211:1162-1164, 1970.
21. Slater, E. M., Gibson, J. M., Dykes, M. H. M., et al: "Postoperative Hepatic Necrosis—Its Incidence and Diagnostic Value in Association with the Administration of Halothane." *New Eng J Med,* 270:983-987, 1964.
22. Mushin, W. W., Rosen, M., Bowen, D. J., et al: "Halothane and Liver Dysfunction: A Retrospective Study." *Brit Med J 2,* 329-341, 1964.
23. Herbert, R., Specht, N.: "Liver Necrosis Following Anesthesia." *Arch Intern Med,* 115:266-272, 1965.
24. Gall, W. A.: "Report of the Pathology Panel-National Halothane Study." *Anesthesiology,* 29:233-248, 1968.
25. Babior, B. M., Davidson, C. S.: "Postoperative Massive Liver Necrosis." *New Eng J Med,* 276:645-652, 1967.
26. Blackburn, W. R., Ngai, S. H., Lindenbaum, J.: "Morphologic Changes in Hepatic Necrosis Following Halothane Anesthesia in Man." *Anesthesiology,* 25:270-283, 1964.
27. Rodriguez, M., Paronetto, F., Schaffner, F., et al: "Antimitochondrial Antibodies in Jaundice Following Drug Administration." *JAMA,* 208:148-150, 1969.
28. Little, D. M. and Welstone, J. H.: "Anesthesia and the Liver." *Anesthesiology,* 25:815-853, 1964.
29. Klatskin, G. and Kimberg, D. V.: "Recurrent Hepatitis Attributable to Halothane Sensitization in an Anesthetist." *New Eng J Med,* 280:515-522, 1969.
30. Taves, D. R., Fry, B. W., Freeman, R. B., et al: "Toxicity Following Methoxyflurane Anesthesia II. Fluoride Concentration in Nephrotoxicity." *JAMA,* 214:91-95, 1970.
31. Belfrage, S., Ahlgren, I., Axelson, S.: "Halothane Hepatitis in an Anesthetist." *Lancet,* 2:1466-1467, 1966.
32. Taves, D. R., Gillies, A. J., Freeman, R. B., et al: "Toxicity Following Methoxyflurane Anesthesia III. Hemodialysis of Metabolites." *JAMA,* 214:96-97, 1970.

CAMPBELL'S SOUPS IN DIABETIC DIETS*

RECOMMENDATIONS FOR PLACING CAMPBELL'S SOUPS* INTO EXCHANGE LISTS

* These recommendations are based on a *one cup portion* when prepared according to directions on the label. If milk is used in the preparation, use part of your daily requirement.

Exchange Substitution for 1 Bread and ½ Fat
Tomato
Tomato, Bisque of
Tomato Rice, Old Fashioned

Exchange Substitution for ½ Bread and ½ Fat
Asparagus, Cream of

Exchange Substitution for 1 Meat and 1½ Bread
Hot Dog Bean
Split Pea with Ham

Exchange Substitution for ¼ Meat and ½ Bread
Chicken Gumbo
Chicken Noodle

Campbell's Soups are appetizing and enjoyable and, because of the many varieties available, offer your diabetic patients the opportunity to plan and enjoy more interesting and appealing meals.

*To obtain copies of "Recommendations for Placing Campbell's Soups Into Exchange Lists," suitable for distribution to patients, write to Campbell Soup Company, Dept. 500, Campbell Place, Camden, N.J. 08101.

here's a soup
for almost every patient and diet
.for every meal
and, it's made by Campbell

An excerpt from the Searle series "The Ecology of Birth Control"*

The Unwanted Child & Birth Control

Ten thousand battered children–a growing medical problem?

In his daily practice the physician witnesses the human suffering caused by uncontrolled fertility. Perhaps one of its most tragic effects is the unwanted child, who so often experiences parental rejection. The rejected child in a family may be neglected, nagged and severely punished. Sometimes he is criminally abused. Child abuse is common enough to have become a separate clinical entity: the "battered child" syndrome. Reliable statistics are difficult to obtain, but it has been estimated that in this country alone roughly 10,000 children are "battered" per year, and their number may be increasing.

A revealing picture of child abuse patterns is provided by one study of the American Humane Society. More than half of the 662 children involved (all reported in newspapers within a single year) were less than 4 years of age. One fourth of the battered youngsters died; most of these deaths were of children less than 2 years of age. Fathers were more often guilty of child abuse than mothers, but sometimes both parents participated. The study indicated that battered children are not limited to any particular socioeconomic stratum.

***For the complete brochure, and others in the serie as they appear, please write to Searle or ask your Searle representative.** Explored in the forthcoming issues will be the history of birth control, the influenc of poverty, ethnic factors and marital status, its role in illness, its genetic implications and its effects on the emotional and behavioral life of the individual.

Searle contributions to the science of contraception

BOTH AVAILABLE IN 21- AND 28-PILL SCHEDULES

Ovulen® · Demulen®

ach white tablet contains: ethynodiol
iacetate 1 mg./mestranol 0.1 mg

Each white tablet contains: ethynodiol
diacetate 1 mg./ethinyl estradiol 50 mcg.

ach pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

emulen . . . for its low estrogen and Searle's progestin—or Ovulen . . . with its wide physician nd patient acceptance. Both offer almost complete contraceptive effectiveness and a w incidence of side effects. Both with a choice of pill-taking schedules . . . simple Sunday-starting" and patient-proof Compack® tablet dispensers.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output gonadotropins from the pituitary gland. Ovulen and Demulen depress the out- ut of both the follicle-stimulating hormone (FSH) and the luteinizing rmone (LH).

Special note—Oral contraceptives have been marketed in the United States nce 1960. Reported pregnancy rates vary from product to product. The effec- eness of the sequential products appears to be somewhat lower than that of e combination products. Both types provide almost completely effective con- aception.

An increased risk of thromboembolic disease associated with the use of hor- onal contraceptives has now been shown in studies conducted in both Great ritain and the United States. Other risks, such as those of elevated blood essure, liver disease and reduced tolerance to carbohydrates, have not been antitated with precision.

Long-term administration of both natural and synthetic estrogens in subpri- ate animal species in multiples of the human dose increases the frequency of me animal carcinomas. These data cannot be transposed directly to man. e possible carcinogenicity due to the estrogens can be neither affirmed nor futed at this time. Close clinical surveillance of all women taking oral contra- ptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disor- rs, cerebral apoplexy or a past history of these conditions, markedly impaired er function, known or suspected carcinoma of the breast, known or suspected trogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of rombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary bolism and retinal thrombosis). Should any of these occur or be suspected e drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and dies of morbidity in the United States have shown a statistically significant sociation between thrombophlebitis, pulmonary embolism, and cere- al thrombosis and embolism and the use of oral contraceptives. There have en three principal studies in Britain[1-3] leading to this conclusion, and one[4] in s country. The estimate of the relative risk of thromboembolism in the study by ssey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United ates found a relative risk of 4.4, meaning that the users are several times as likely undergo thromboembolic disease without evident cause as nonusers. The erican study also indicated that the risk did not persist after discontinuation of ministration, and that it was not enhanced by long-continued administration. e American study was not designed to evaluate a difference between products. wever, the study suggested that there might be an increased risk of throm- embolic disease in users of sequential products. This risk cannot be quanti- ed, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or com- ete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. xamination reveals papilledema or retinal vascular lesions medication should withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demon- ated, it is recommended that for any patient who has missed two consecutive riods pregnancy should be ruled out before continuing the contraceptive regi- en. If the patient has not adhered to the prescribed schedule the possibility of egnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identi- d in the milk of mothers receiving these drugs. The long-range effect to the nurs- infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should lude special reference to the breasts and pelvic organs, including a Papani- laou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

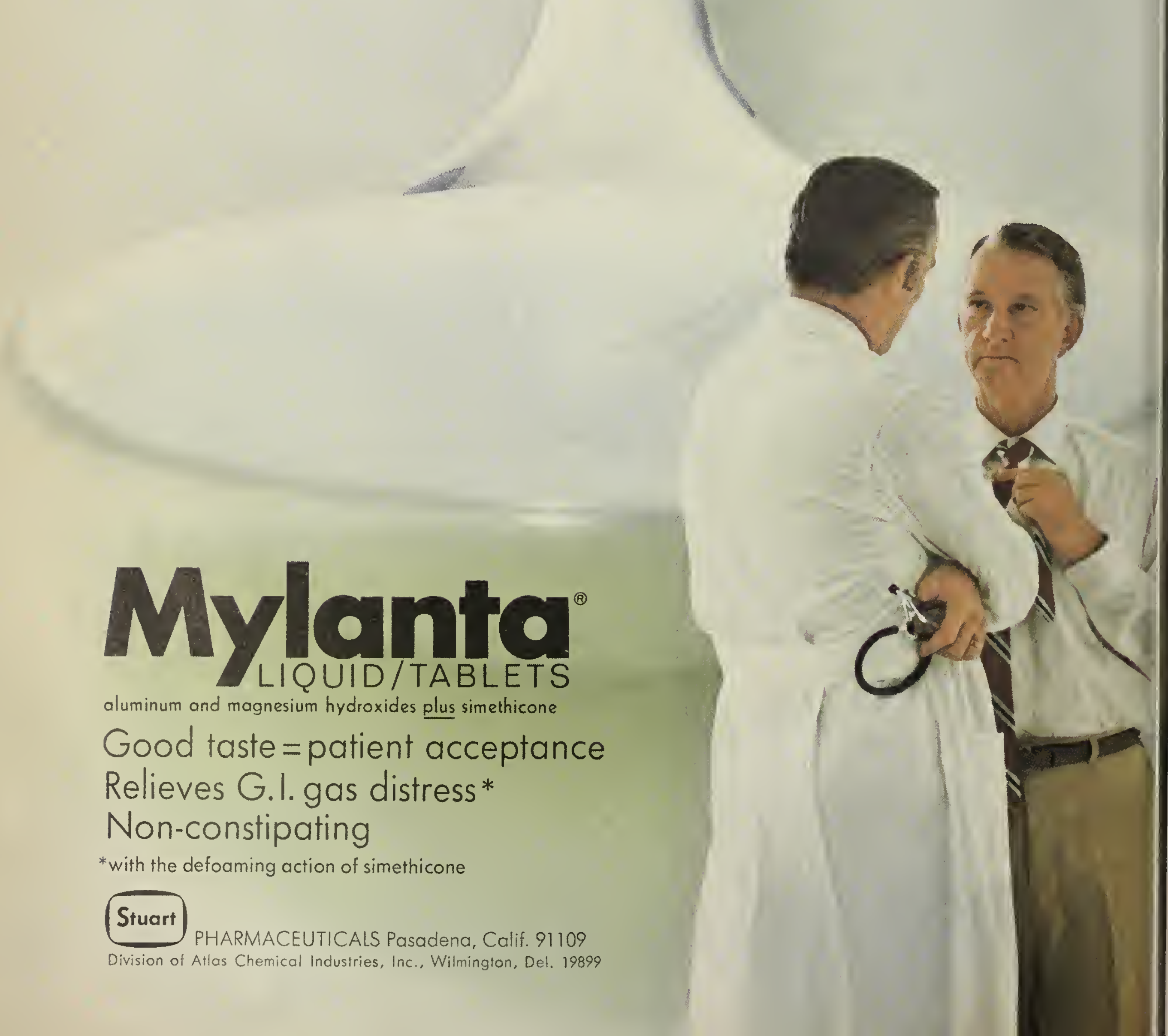
The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. **2.** Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. *2*:193-199 (April 27) 1968. **3.** Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. *2*:651-657 (June 14) 1969. **4.** Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. *90*:365-380 (Nov.) 1969. 1A5

SEARLE
Where "The Pill" Began
G. D. Searle & Co., P. O. Box 5110, Chicago, Illinois 60680

Mylanta®
24 million hours a day.

Through the day, every day,
ulcer patients take
one million doses of Mylanta
for relief of ulcer pain.



Mylanta®
LIQUID/TABLETS
aluminum and magnesium hydroxides plus simethicone

Good taste = patient acceptance
Relieves G.I. gas distress*
Non-constipating

*with the defoaming action of simethicone

Stuart PHARMACEUTICALS Pasadena, Calif. 91109
Division of Atlas Chemical Industries, Inc., Wilmington, Del. 19899

Your opinion please

"How could Michigan and the nation effectively put greater emphasis on health education—proper nutrition, hygiene, prenatal care, etc.—as one way to counteract increasing demands on medical manpower and increasing health care costs?"

**Frederick J. Margolis, MD,
Kalamazoo**

Our patients and the public in general are hungry for reliable health information. The problem is that very few of us are interested in or comfortable with the role of health educator. If we did half the job in giving health information that we do in giving quality medical care, we could make quite an impact in our communities. We are in a unique position and could make a significant impact because our patients trust us and recognize that we are authoritative in presenting health matters. I would like to discuss a few practical medical subjects that I believe demand more insightful perspectives.

NUTRITION: We need to recognize that in families where a child is a wanted child good nutrition is high on the list of the mother's priorities, but with half of the children born in this country unwanted and unexpected, parents often express their bad feelings in the emotional, physical and nutritional neglect of the child. Then there is the exhausted mother, with too many children and not enough money, who can hardly struggle through the day let alone worry about a balanced diet. These are a few examples of the realities we must consider in dealing with our 30 million poorly fed Americans.

NUMBER ONE NUTRITIONAL DEFICIENCY: Nutritionists report thirty percent of the children in the United States have an iron deficiency anemia. Our Public Information Committee of the American Academy of Pediatrics recently decided to send a letter to all hospitals in the United States asking their medical staff to instruct the hospital purchasing agent to buy formulas with iron exclusively. This simple maneuver could have a significant effect on the hemoglobin levels of infants throughout the United States. I believe those of us in private practice should be on the alert to spot such simple yet significant methods of problem solving.

NUMBER ONE MORBIDITY PROBLEM: The number one morbidity problem in the United States is dental caries. What has dental caries got to do with the physician? . . . everything. Most of the teeth are calcified before the child ever sees a dentist. This means if fluoride is going to be supplemented it has to be done during the time that the child is under the care of the physician. Unfortunately, the child who needs dental care the most is unable to afford dental services. With water fluoridation or fluoride supplement seventy-five percent of his dental problems could be solved. In the year 1971 it is as equally shameful for children to grow up without fluoride exposure as it is to neglect their immunizations. How many of us have taken a strong position in the health education of our communities in relation to water fluoridation?

A NEW METHOD IN PATIENT COMMUNICATIONS: Many of our patients are hesitant about asking questions because they feel we are too busy to take time with what they consider might be a silly question. This is a serious commentary and prompted us to solve the problem in this way. We built a special room in our office that will accommodate fifty people. We invite twenty-five couples, whose children are our patients, to spend two hours of an evening discussing the art of child rearing and family development. We feel this is health education at its best. Parents learn something about helping the child develop self respect, healthy gender identity, and how to become a responsible member of the family. These evening sessions can be used in many health education areas. We may have a group come in to see a film on allergy, for those patients who have allergic children. It would be difficult in this limited paper to relate the knowledge, sense of comfort, and enthusiasm these parents have expressed.

MEDICAL POLITICS: The political arena is another area where sound health information must be injected. Our political leaders correctly state that everyone in this country should have fine medical care. Yet some politicians actually approve of an unscientific cult (Chiropractors) receiving funds from federal health programs. Impossible? . . . but true. Chiropractors are about

(Continued on Page 828)

MeadJohnson—pharmaceuticals created for your specialized clinical needs

One good K-Lyte® deserves another...

Each effervescent tablet in solution supplies 25 mEq potassium as bicarbonate and citrate

Introducing

K·LYTE®/CL

Each dose in solution supplies 25 mEq. potassium chloride

potassium supplement with chloride

The good-tasting way to treat hypokalemias induced by thiazide diuretics and other drugs…

Here, at last, is a potassium chloride supplement that just doesn't taste like one! The mixed fruit flavor of new K-Lyte/Cl is truly refreshing. Now, K-Lyte/Cl offers your patients all of the therapeutic advantages you expect from a potassium chloride supplement. And you can be sure that your patients will take the K-Lyte/Cl you prescribe—all in good taste.

Now you have a choice…

When extra chloride is not desired, original effervescent K-Lyte is unsurpassed in flavor, effective and safe in short- or long-term potassium supplementation. There is little chance of taste fatigue from K-Lyte with two delicious, effervescent flavors to alternate…fresh-tasting orange and sparkling lime.

K-Lyte® Each effervescent tablet in solution supplies 25 mEq. potassium as bicarbonate and citrate

K-Lyte®/Cl Each dose of powder in solution supplies 25 mEq. potassium chloride

Each tablet or dose must be completely dissolved before taking.
Indications: K-Lyte and K-Lyte/Cl are oral potassium supplements for therapy or prophylaxis of potassium deficiency. Particularly useful when thiazide diuretics or corticosteroids cause excessive excretory potassium losses. **Contraindications:** Impaired renal function with oliguria or azotemia; Addison's disease; hyperkalemia from any cause. **Warnings and Precautions:** Since the amount of potassium deficiency may be difficult to determine accurately, supplements should be administered with caution, and dosages adjusted to the requirements of the individual patient. Potassium intoxication rarely occurs in patients with normal kidney function. Symptoms of potassium intoxication are variable. They include listlessness, mental confusion, and tingling of the extremities. Frequent checks of the clinical status of the patient, ECG, and serum potassium level are desirable. In established hypokalemia, attention should also be directed toward other potential electrolyte disturbances. Potassium supplements should be given cautiously to digitalized patients. To minimize the possibility of gastrointestinal irritation associated with the oral ingestion of concentrated potassium salt preparations, patients should be carefully directed to dissolve each dose completely in the stated amount of water. K-Lyte/Cl contains 4.9 grams (20 calories) of sucrose per dose which should be considered for patients with restriction of caloric intake. **Adverse Reactions:** Nausea, vomiting, diarrhea, and abdominal discomfort may occur with the use of potassium salts. **Dosage and Administration:** Adults: 1 tablet or dose *completely dissolved,* 2 to 4 times daily, depending upon the requirements of the patient: K-Lyte: 1 tablet (25 mEq. potassium) in *3 to 4 ounces of cold or ice water;* K-Lyte/Cl: 1 dose (25 mEq. potassium chloride) in *6 ounces of cold or ice water.* The normal adult daily requirement is approximately 50 mEq. of elemental potassium. NOTE: *It is suggested that these products be taken with meals and sipped slowly over a 5-10 minute period.* **How Supplied:** K-Lyte: Effervescent tablets—boxes of 30 and 250 (orange or lime flavors). K-Lyte/Cl: Powder, cans of 30 measured doses with scoop (fruit-punch flavor). ℞

© 1971 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U.S.A. 181471

Mead Johnson
LABORATORIES

as deserving of collecting fees as my great-grandmother was for spitting in your eye to cure your stye. It is incredible that these practitioners are performing in the year 1971. This is but an indication of the ineffectiveness of our health education programs. As a challenge to your creativity, how would you suggest the medical community respond to a chiropractor who writes in one of the newspapers that parents should not have Rubella shots for their children? He quotes from a medical textbook last published in 1955 that says that children should be allowed to have this mild disease and that the presently available immunization program is but a financial scheme of the medical profession.

In my judgment the presentation of significant health education is a must, not a choice, for us. We are most respected in our own communities and it is there that we should do the job. There are several communities in Michigan where local physicians have done just that. I find our local radio and television stations are ready and willing to help. The real question is how many of us have the courage to perform outside of the umbrella of our professional operation? Our shortsighted abdication of recognizing public and community needs has already set the stage for both political parties accepting a role in national health planning. With all the political leaders moving toward national planning we will find ourselves alone.

One final thought, and perhaps a foolish one, but would all of the members of MSMS be willing to contribute an extra 50 dollars a year for the following program? I suggest that MSMS hire three top flight health educators who with us would identify ten major health areas that need attention in Michigan. These individuals would tour the State and discuss major health education concepts with PTA groups, churches, local radio and television stations, high school health classes and the press. They could, for example, explain why a punitive approach does not prevent drug addiction, how prematurity rates can be cut in half with good prenatal care, why high school students need to know about health sciences, why we consider alcoholism a disease and what is behind the personality that tends toward a life of alcoholism.

This short discussion covers but a few concepts, any of which could be a paper in itself, where we could function as health educators.

Leland C. Brown, MD, MPH
Mount Clemens

Health care costs are related to costs of persons and facilities giving service. They are not related to the persons or illnesses presented for care, because for some years in a free market, health care facilities have tended to be utilized to the extent they are available without regard to a strict need for care.

Currently, increased awareness through education of nutrition, need for prenatal care, need for dental care, etc., tends to increase the load on the system. The cost is, therefore, greater than that generated by allowing the system to provide only acute and rehabilitative care. This is not to say that increased awareness is not desirable. However, since utilization of preventive and other service is related to ability to pay for such service, rather than awareness of need for the service, education alone is not sufficient. Relatively more is spent for care of all sorts by the well-to-do, than is spent for acute care needs by those of limited income in spite of their awareness.

It is true, that once symptomatic episodic illness occurs, the cost of care can be reduced if free or unlimited (by money or geography) access is available to outpatient services. This is in contrast to situations where care will be put off because of cost until such time as inpatient care becomes mandatory and the cost then is greater.

Certainly many environmental health practices along with economies of scale (municipal sewage treatment plants, fluoridated water) and required procedures on groups of susceptibles (preschool immunization) do reduce acute illness and its expense; but these practices depend on the functioning of agencies, laws, or relatively brief periods of community interest for success.

Individual long term benefits of preventive health maintenance are much more likely to arrive with improving economic well-being than with attempts at health education and exhortations to utilize community facilities. Even so, the cost will not be less, though the level of health becomes better.

The girth control pill

Tepanil® Ten-tab®

(continuous release form)

diethylpropion hydrochloride, N.F.)

Vhen girth gets out of control, TEPANIL can provide sound upport for the weight control program you recommend. EPANIL reduces the appetite—patients enjoy food but eat ess. Weight loss is significant—gradual—yet there is a relavely low incidence of CNS stimulation.

ontraindications: Concurrently with MAO inhibitors, in patients hypersensitive to is drug; in emotionally unstable patients susceptible to drug abuse.

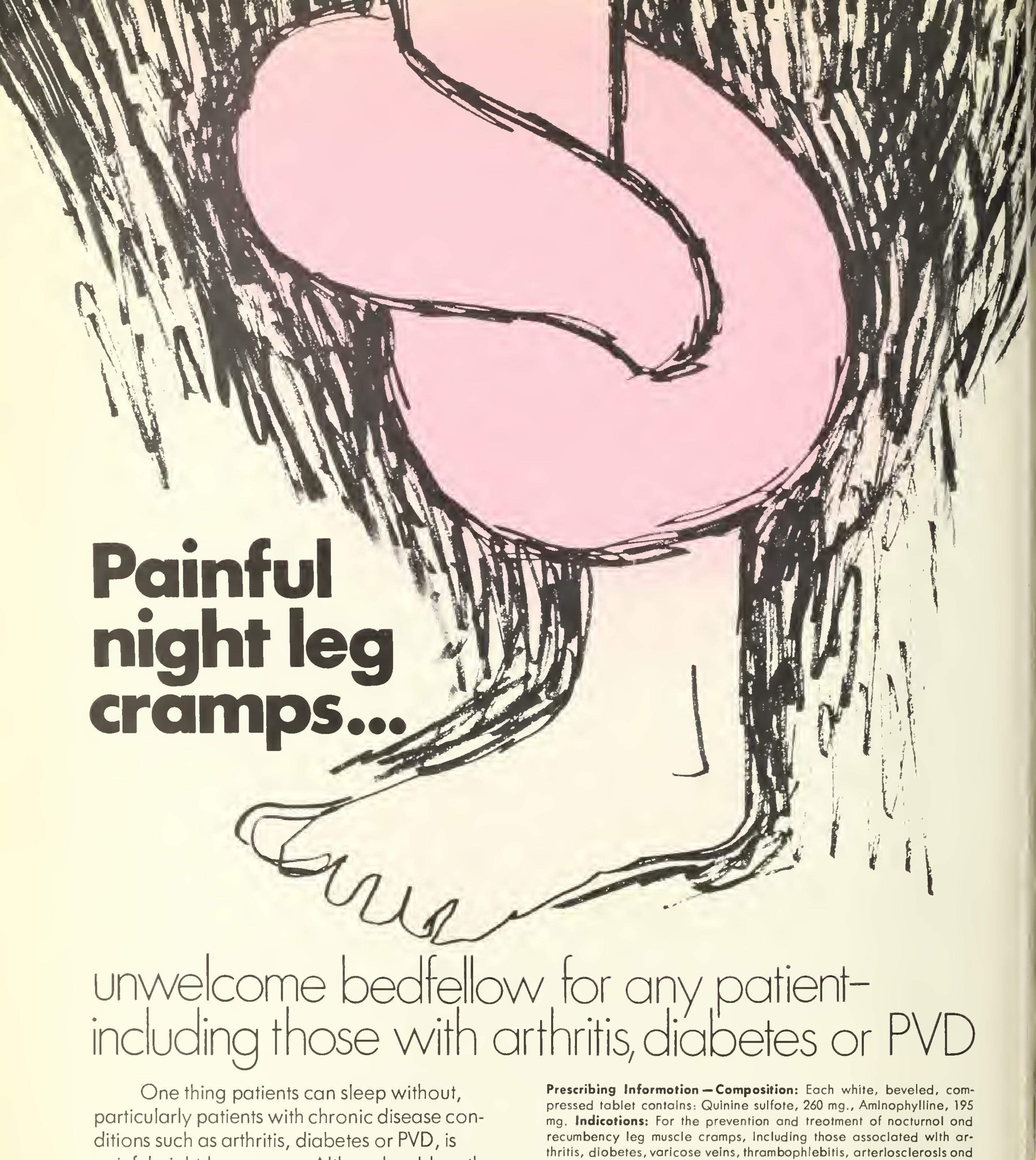
/arning: Although generally safer than the amphetamines, use with great caution in atients with severe hypertension or severe cardiovascular disease. Do not use durg first trimester of pregnancy unless potential benefits outweigh potential risks.

dverse Reactions: Rarely severe enough to require discontinuation of therapy, uneasant symptoms with diethylpropion hydrochloride have been reported to occur relatively low incidence. As is characteristic of sympathomimetic agents, it may casionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. *Sympathomimetic cardiovascular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

T-107/4/71/U.S. PATENT NO. 3,001,910

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144



Painful night leg cramps...

unwelcome bedfellow for any patient–including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

Q103 2/71

Quinamm™ Specific therapy for night leg cramps

(quinine sulfate 260 mg., aminophylline 195 mg.)

SSA Penny-Wise, Pound-Foolish about Home Health Service

By Sidney E. Chapin, MD, Highland Park
Medical Director, Home Care Program,
Metropolitan Detroit VNA

Michigan physicians who are disturbed about the penny-wise-pound-foolish posture of the Social Security Administration decisions re Home Health Care are urged to write federal authorities and discuss the needs for stability in administration and financing.

Physicians can write directly to President Nixon, to the secretary of the U.S. Department of Health, Education and Welfare, to the director of the Social Security Administration, and to the Michigan members of the United States Congress. Do not write to Michigan Blue Cross because the intermediary merely follows the interpretations dictated by the SSA.

It has long been my personal contention, based on first-hand experience, that Home Health Care is the most economical method of caring for the sick. However this small (1.5%) part of the total federal health care budget is under relentless attack.

Many impractical interpretations of the Home Care aspect of the Medicare Act by the SSA are denying senior citizen patients needed care. In addition, the added explanations and documentations required by SSA add immeasurably to the paper work for the physician if he is to help the patient and reduce the total costs of health care.

Originally, the Medicare Act promised traditional Visiting Nurse Association home care services to patients eligible under the Act. Now, SSA re-interpretations have eliminated many patients from eligibility. Some of these decisions completely ignore the moral support that patients need to facilitate economical treatment at home.

Let me cite some cases:

The patient not completely homebound, or the patient who does not need physical or speech therapy or "skilled nursing care" is denied services. Yet, in practice it is a well known fact that many long-term patients need other kinds of help to maintain health, prevent complications, promote rehabilitation, and prevent hospitalization.

—There are more reasons why a diabetic needs help in learning to take insulin than blindness or senility alone, but he is denied the service even if his physician believes it is necessary.

—If a physician is concerned about his patient's response to digitalis, the nurse's skilled services in taking vital signs are not paid for—the patient must have an acute episode to be eligible.

—To have a nurse check a patient to see if he is following a bland or diabetic diet correctly is not a benefit even if a language difficulty is present.

—And, says the SSA, the physician's opinion notwithstanding, if someone else decided that the drug prescribed is just as effective orally as by injection, the benefit for the injection is denied.

—The fiscal intermediary for Medicare, under instructions from the SSA, will pay for the Home Care patient's commode or bedpan only if you specifically document the fact that you forbid him, or he is incapable of, using his outdoor privy.

—The elderly spinster patient, who still lives alone, is deprived of a nurse's service for a necessary enema if no relative is available and her neighbor refuses to get involved.

—"Skilled nursing care," the definition of which remains elusive, is the basis for eligibility for home health benefits. This emphasizes how nebulous the entire home health service concept has become under the constantly-changing interpretations issued by the SSA.

—"If physical or speech therapy is required it does not matter whether the patient has a chronic or acute illness, stabilized or unstabilized." This statement by SSA completely ignores the majority of patients, diagnoses and medical situations that are encountered among senior citizens requiring home health services.

—And, if the patient's wife cannot learn to care for his indwelling catheter in one easy lesson, the SSA rules that a nurse's service beyond that point is not eligible for payment.

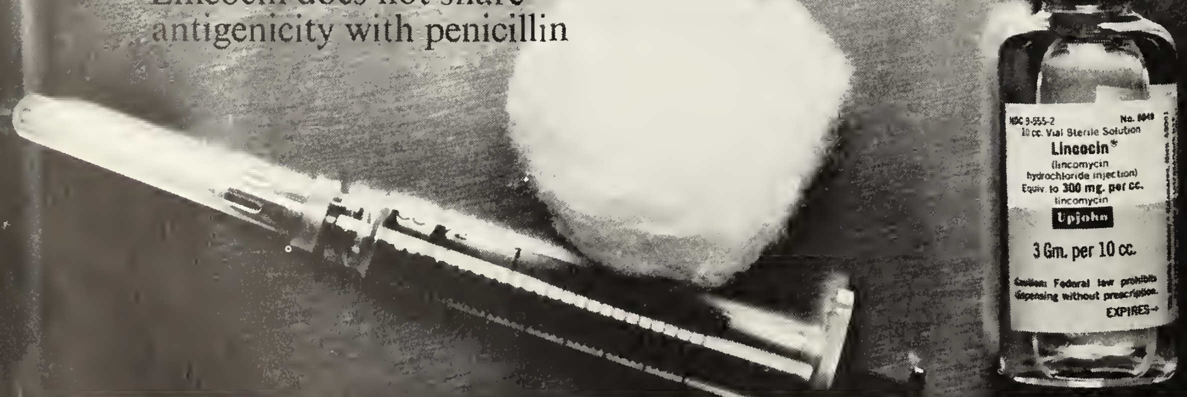
These, and a host of other unreasonable interpretations of the Home Care aspect are denying senior patients necessary care. As a result, Home Health Agencies find themselves hampered in their efforts to deliver services, many agencies have been forced into financial straits when payment for services already delivered have been denied, and many physicians are indeed frustrated and discouraged.

Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With ß-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.


10 cc. Vial Sterile Solution
Lincocin®
(lincomycin hydrochloride injection)
Equiv. to 300 mg. per cc. lincomycin
Upjohn
3 Gm. per 10 cc.
Caution: Federal law prohibits dispensing without prescription.
EXPIRES→

So is penicillin-resistant staph.

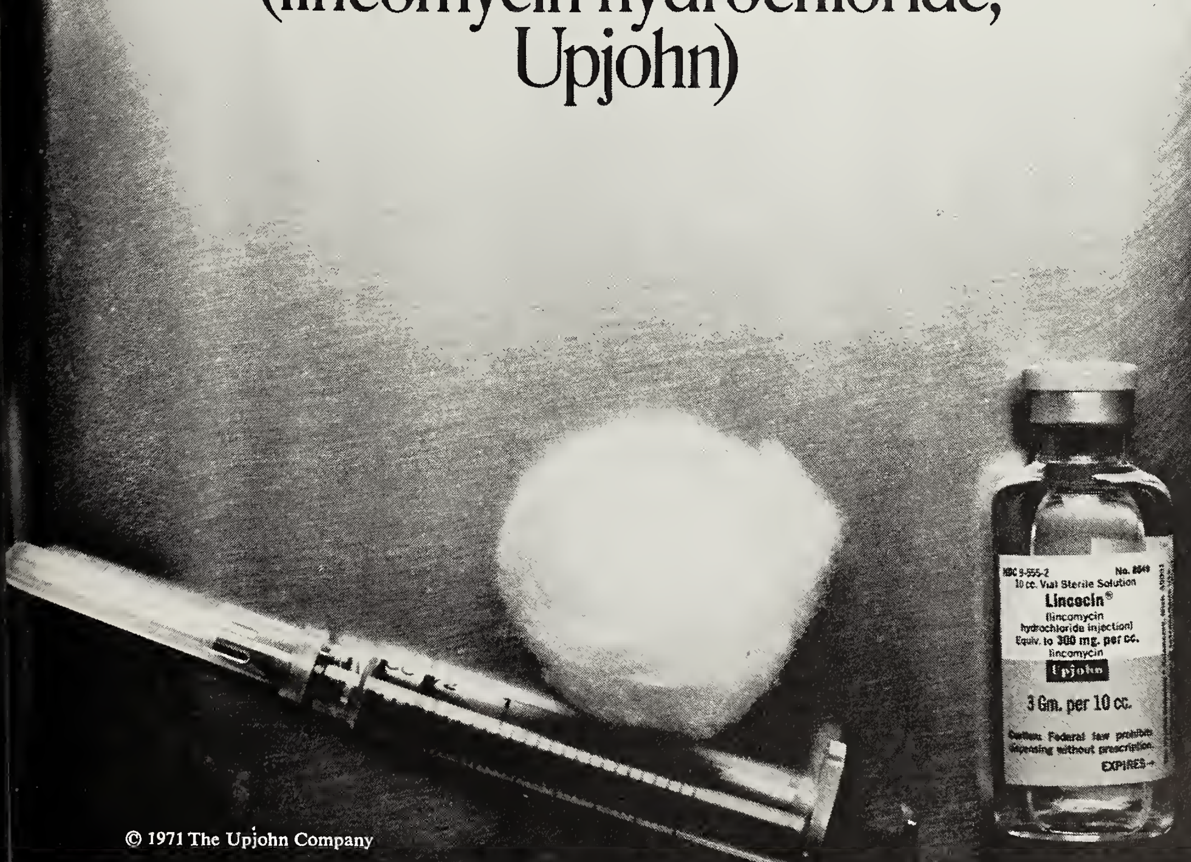
Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn)


NDC 9-555-2
No. 8549
10 cc. Vial Sterile Solution
Lincocin®
(lincomycin hydrochloride injection)
Equiv. to 300 mg. per cc. lincomycin
Upjohn
3 Gm. per 10 cc.
Caution: Federal law prohibits dispensing without prescription.
EXPIRES→

© 1971 The Upjohn Company

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

Syrup, 250 mg. per 5 ml.—60 ml. and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

JA71-1203 MED B-5-SR (KZL-6)

The Upjohn Company
Kalamazoo
Michigan 49001

Upjohn

Mediscene

Sept. 18—Volunteer Leadership Conference of Michigan Diabetes Association, MSU Kellogg Center, contact: Continuing Education Service, MSU, East Lansing, 48823

Oct. 20-21—Michigan Tuberculosis and Respiratory Disease Education Meeting, MSU Kellogg Center, contact: Continuing Education Service, MSU, East Lansing, 48823

Oct. 24-26—Emergency Drug Treatment Reaction Workshop, MSU Kellogg Center, contact: Continuing Education Service, MSU, East Lansing, 48823

Sept. 16-18—Michigan regional meeting of the American College of Physicians, in conjunction with the Michigan Society of Internal Medicine, Sheraton-Cadillac Hotel, Detroit, contact: Muir Clapper, MD, ACP Governor for Michigan, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Sept. 23-24—American Heart Association, North Central Region, first "Comprehensive Conference on Stroke," Cobo Hall, Detroit

Sept. 25-26—Fall education seminar and board meeting, Michigan State Medical Assistants Society, Holiday Inn, St. Joseph, contact: Claire Van Dam, 1850 Colfax at Lomar, Benton Harbor, 49022

Sept. 29—M.E.S.H. Council Meeting (Michigan Emergency Services Health Council), Lansing, 9:00 to 4:00 p.m., contact: Gaius Clark, MD, American College of Emergency Physicians, 241 East Saginaw, Suite 503, East Lansing, 48823

Oct. 1—Michigan Hospital Association House of Delegates meeting, Park Place Motor Inn, Traverse City, contact: H. Allan Barth, executive director, MHA, 2213 E. Grand River Ave., Lansing, 48912.

Oct. 3 and 6—MSMS Council, Pantlind Hotel, Grand Rapids

Oct. 3-7—1971 MSMS Annual House of Delegates meeting and Scientific Sessions, Civic Auditorium, Grand Rapids

Oct. 4-6—1971 Annual Convention of the Woman's Auxiliary to MSMS, Pantlind Hotel, Grand Rapids

Oct. 11—Departure Day for 14-day MSMS Orient Adventure; contact: Miss Helen Schulte, MSMS Headquarters

Oct. 17-23—1971 Community Health Week

Oct. 12-14—"Basic Electronics for the Practice of Cardiology," three day seminar, Beaumont Hospital, Royal Oak, contact: Don Beard, Michigan Heart Association, P.O. Box LV-160, Southfield, 48076, (313) 557-9500, deadline, Sept. 27

Oct. 15—"First Annual Michigan Cardiovascular Research Forum," a presentation of 18 cardiovascular research studies, all day Friday, the Buerki Auditorium of Henry Ford Hospital, Detroit, contact: Harold Arnow, Public Information Director, Michigan Heart Association, P.O. Box LV-160, Southfield, 48076, (313) 557-9500

Oct. 20-21—Michigan TB and Respiratory Disease Association Education Meeting, Kellogg Center, East Lansing, contact: Les Harcus, Public Relations, Michigan TB and Respiratory Disease Association, 403 Seymour, Lansing

Oct. 20—Woman's Auxiliary to MSMS District IV Meeting, Holland

Oct. 21—Woman's Auxiliary to MSMS District III Meeting, Allegan

Oct. 25-29—Michigan Nurses Association Convention, Pantlind Hotel, Grand Rapids, contact: William E. Ludwig, MNA, 120 Spartan Ave., East Lansing, 48823

Oct. 26—Woman's Auxiliary to MSMS District II Meeting, Adrian

Oct. 27—Woman's Auxiliary to MSMS District I Meeting, Pontiac

Oct. 28—Woman's Auxiliary to MSMS District V Meeting, Flint

Nov. 3 and 4—The First Michigan Allied Health Postgraduate Course in Diabetes will be held at Sinai Hospital in Detroit, contact: Miss Barbara Lofquist, regional director, 6131 West Outer Drive, Detroit, 48235. Dinner meeting, Northland Inn, Nov. 3, afternoon workshop session, Nov. 4

Nov. 4-5—Harold C. Mack Symposium on Physiology and Pathology of Reproduction, Rackham Building, Detroit

Nov. 10—MSMS Council, MSMS Headquarters, East Lansing, noon to 5 p.m., contact: Warren F. Tryloff, MSMS Director, MSMS Headquarters

Nov. 28-Dec. 10—Many Michigan physicians will be attending the AMA Clinical Convention in New Orleans

Dec. 1 and 2—Detroit Trauma Day, Wayne County Medical Society Headquarters, Detroit, contact: Robert Wilson, MD, Department of Surgery, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Dec. 8—MSMS Council, MSMS Headquarters, East Lansing, 9:30 a.m., contact: Warren F. Tryloff, MSMS Director, MSMS Headquarters

Dec. 8—11th Annual Thyroid Workshop, sponsored by Thyroid Service of Wayne State University School of Medicine, Wayne County Medical Society Auditorium, Detroit; contact: Ali Abbasi, MD, Publicity Committee, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Funds Will Initiate WSU's Center On Thrombosis Research

Wayne State University has been awarded $326,230, the first in a series of five annual grants totaling well over $1-million, by the National Heart and Lung Institute, U. S. Department of Health, Education and Welfare for the purpose of initiating research on thrombosis.

The funds will enable the Department of Physiology and the Department of Pathology at the WSU School of Medicine to establish a Specialized Center of Research on Thrombosis. Principal investigator will be Walter H. Seegers, PhD, Chairman of the Department of Physiology and William D. Traitel Professor of Hematology. Dr. Seegers' research group will study the underlying chemistry of the formation of blood clots, considered to be one of the most complex subjects in the field of biology.

Dr. Seegers will study a number of aspects of the special protein, thrombin, which he has isolated from the blood, while Eberhard F. Mammen, MD, will concentrate on the manner in which the powerful enzyme thrombin is produced.

Wayne State University is one of five institutions chosen for a thrombosis center.

FEE HALL PROJECT TO ENLARGE COLLEGE OF OSTEOPATHS

Work is underway to convert part of a Michigan State University residence hall into teaching laboratories for medical students.

The $415,000 project, which will require state funding, will provide additional teaching laboratories, offices and seminar rooms for the MSU College of Osteopathic Medicine and some of the basic medical science departments.

Fee Hall was selected because it is close to Life Sciences I building and other health science facilities.

NEWAYGO SOCIETY INVESTIGATES LOCAL PHYSICIAN SHORTAGE

Brooker L. Masters, MD, MSMS councilor, representing the Newaygo County Medical Society, discussed the physician shortage in the area at a recent meeting of the Fremont City Commission. He urged the commissioners to use their influence to attract more doctors to the county in an attempt to alleviate the shortage of medical personnel.

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road　Conducted by Sisters of Mercy　Ann Arbor, Michigan

Telephone — 313 663-8571

Mercywood Hospital is a private neuropsychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multi-disciplinary treatment for emotional and mental disorders.

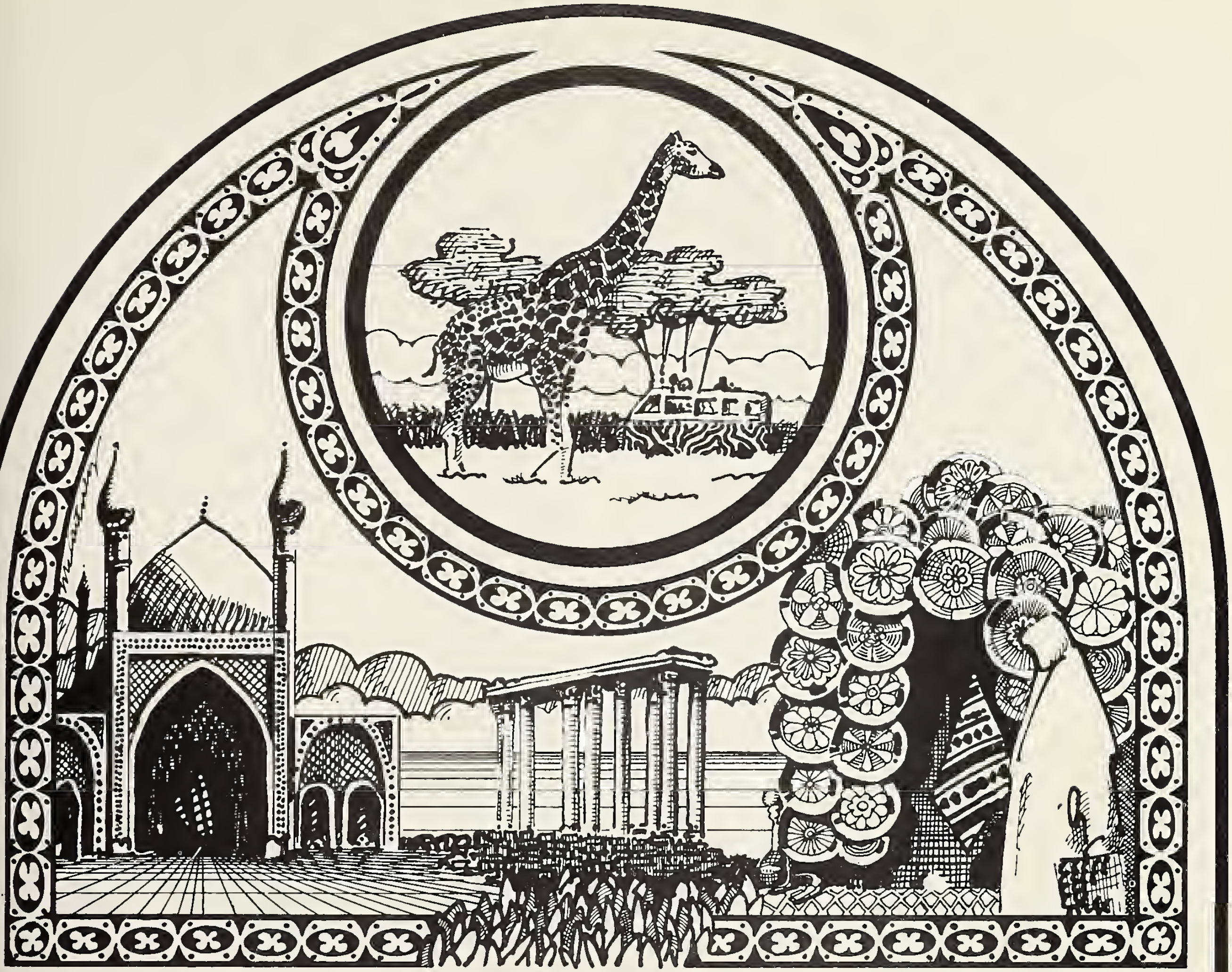
Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs

PSYCHIATRIC STAFF

Lyle M. Allis, M.D.
Robert J. Bahra, M.D.
Dean P. Carron, M.D.
Francis M. Daignault, M.D.
Gordon C. Dieterich, M.D.
James R. Driver, M.D.
Alexander P. Dukay, M.D.
Robert L. Fransway, M.D.
Stuart M. Gould, Jr., M.D.
Leonard E. Himler, M.D.*
Sydney Joseph, M.D.
Hubert Miller, M.D.
Jacob J. Miller, M.D.
Rudolf Nobel, M.D.
Gerard M. Schmit, M.D.
Prehlad S. Vachher, M.D.
Richard D. Watkins, M.D.

*1904-1967



MICHIGAN STATE MEDICAL SOCIETY

AFRICAN ADVENTURE

Two fun-filled weeks in exciting and colorful Morocco and East Africa. Our African Adventure costs much less than round trip tourist air fare, yet includes direct 707 private jet flights, finest first class hotels, gourmet meals, all the freedom of individual travel, plus many other exclusive features. Our African Adventure is departing

from Detroit, Monday, February 28, 1972

Michigan State Medical Society
Box 950, East Lansing, Mi. 48823

Enclosed is my check for $ ____________
($100 per person) as deposit.
Name ____________________
Address ____________________
City, State ____________ Zip ________
☐ Please send me full color brochure.

$968

AMA Judicial Council Explains Telephone Listings

A physician's telephone listing should be followed by "MD" but not by the abbreviations "SC" (service corporation), "PA" (professional association) or others intended to describe the corporate nature of his practice, the AMA's Judicial Council has recommended.

In 1966, the Judicial Council and the American Telephone and Telegraph Company developed *Guidelines for Telephone Directory Listings* that would be helpful to the public and in keeping with the dignity of professional medical practices.

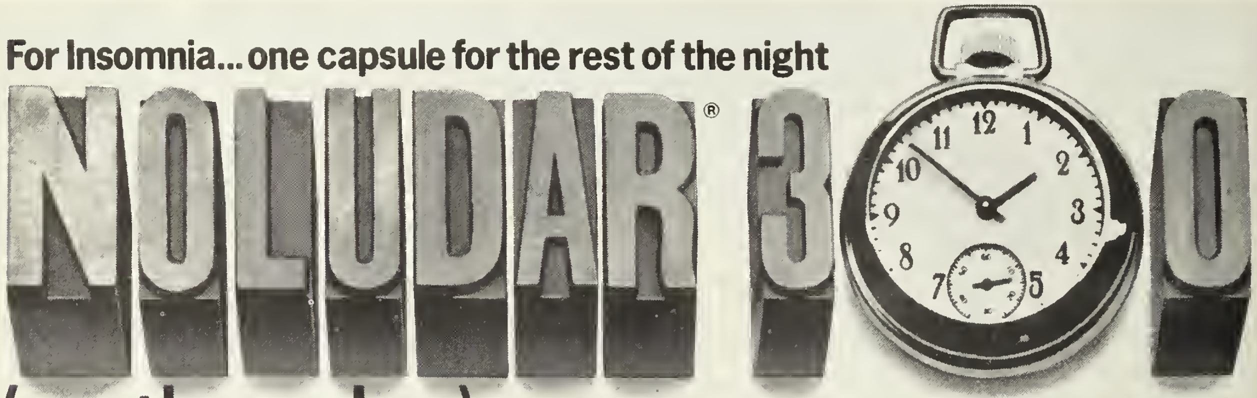
Since then, there has been a trend toward incorporating medical practice and some physicians have sought to use telephone directory listings describing the business or corporate nature of their practice. Such listings are for personal, business or purported legal reasons and are not helpful to the public, the Judicial Council said. Legal experts have advised that the evidentiary value of such listings is minimal. If a physician wishes to obtain an additional listing to describe the business or corporate nature of his practice, this is a matter to be resolved between him and the telephone company, the Judicial Council opinion stated.

USPHS Grants WSU's School of Medicine Funds for Shiffman Library, Clinical Psychology Program

The United States Public Health Service has granted nearly $600,000 to the Wayne State School of Medicine's continuing curriculum development. At this time the undergraduate curriculum is changing gradually to give medical students more clinical training. In addition, the USPHS has also provided $188,000 to Wayne's Shiffman Medical Library and $113,000 to the Clinical Psychology program in the College of Liberal Arts. The Shiffman Library, located in the Detroit Medical Center, houses the headquarters for the Regional Medical Library program for Michigan, Ohio, and Kentucky and the funds will enable community medical library services at 10 universities in the three states to be established.

Donald E. Christensen, MD, Gaylord, has been appointed superintendent at Mt. Pleasant State Home and Training School. Doctor Christensen received his medical degree from Western Reserve in 1958.

For Insomnia...one capsule for the rest of the night



(methyprylon)

Before prescribing, please consult complete product information, a summary of which follows:
INDICATION: Relief of insomnia of varied etiology.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.
Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

ROCHE
ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Main S
PHAR
DONNATA
2 table
3 times

vacation in
a vial:
the spasm
reactors
in your practice
deserve

"the Donnatal® Effect"

	each tablet, capsule or 5 cc. teaspoonful of elixir (23% alcohol)	each Donnatal No. 2	each Extentab®
yoscyamine sulfate	0.1037 mg.	0.1037 mg.	0.3111 mg.
tropine sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
yoscine hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
henobarbital	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.
varning: may be habit forming)			

Brief summary. Side effects: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction as in prostatic hypertrophy. Contraindicated in patients with acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

A. H. ROBINS COMPANY, RICHMOND, VIRGINIA 23220

A·H·ROBINS

LEMON TREE SO VERY PRETTY.
AND THE LEMON FLOWER IS SWEET.
BUT ONE HUNDRED EIGHTY LEMONS,
IS IMPOSSIBLE TO EAT.
LEMON TREE
IN KEY OF C
30 Capsules
Allbee with C
Each capsule Contains:
Thiamine mononitrate (Vit. B1) 15 mg
Riboflavin (Vit. B2) 10 mg
Pyridoxine hydrochloride (Vit. B6) 5 mg
Niacinamide 50 mg
Calcium pantothenate 10 mg
Ascorbic acid (Vit. C) 300 mg
A·H·ROBINS
AHR
AHR

2 ways to provide a month's therapeutic supply of Vitamin C: 180 lemons or 30 Allbee® with C

As a source of ascorbic acid, the lemon really hits a high C (50 mg.). But your patient would still have to eat 180 lemons every month—6 a day—to get a therapeutic dose. And as the calypso singer puts it, "one hundred eighty lemons is impossible to eat." Fortunately, a bottle of 30 Allbee with C capsules (taken one capsule daily) supplies as much Vitamin C as all those lemons, plus full therapeutic amounts of the B-complex vitamins. For example, as much B_6 as two pounds of corn. Allbee with C is no lemon! This handy bottle of 30 capsules gives your patient a month's supply at a very reasonable cost. Also the economy size of 100. Available at pharmacies on your prescription or recommendation.

A. H. Robins Company, Richmond, Va. 23220

A·H·ROBINS

Empirin® Compound with
Codeine, gr.½ or gr.1

Helps overpower pain

ch tablet contains: aspirin gr. 3½,
enacetin gr. 2½, caffeine gr. ½.
). 3 contains codeine phosphate* (32.4 mg.) gr. ½.
). 4 contains codeine phosphate* (64.8 mg.) gr. 1.
Warning—may be habit forming.)

Empirin Compound with Codeine is now classified in Schedule III.
Available on oral prescription and may be refilled 5 times
within 6 months, unless restricted by State law.

mplete literature available on request from Professional Services Dept. PML.

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

in stable adult diabetes, if diet alone fails...

start with DBI®-TD (phenformin HCl)

timed-disintegration capsules 50 mg.

A Distinctive Oral Hypoglycemic

---

a biguanide... not a sulfonylurea

Lowers elevated blood sugar without increasing
endogenous insulin secretion.

Probably, secondary to its hypoglycemic effect,
decreases insulin oversecretion.
This may help to reduce lipogenesis and facilitate lipolysis,
which may account for the clinically reported
loss of excess body weight and lowering of elevated
serum cholesterol levels in overweight,
hypercholesteremic, stable adult diabetics
unresponsive to diet alone.

DBI®-TD (phenformin HCl)

timed-disintegration capsules 50 mg.

lowers elevated blood sugar

How to prescribe DBI®-TD (phenformin HCl)

To start with DBI-TD

Week 1	1 capsule with breakfast may be effective, or a second capsule may be given with the evening meal.
Week 2	Continue effective DBI-TD dosage. If necessary, add an additional capsule to the A.M. or P.M. dose.
Thereafter	Continue effective DBI-TD dosage.

To transfer from sulfonylurea therapy to DBI-TD alone: The first week, withdraw sulfonylurea; start with DBI-TD as indicated in the chart.

To transfer from sulfonylurea therapy to combined therapy with DBI-TD: The first week, continue dosage of sulfonylurea; add DBI-TD as indicated in the chart. When effective regulation of diabetes is attained, sulfonylurea may be reduced and/or withdrawn.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary. **Contraindications:** Diabetes mellitus that can be regulated by diet alone; juvenile diabetes that is uncomplicated and well regulated on insulin; acute complications of diabetes (metabolic acidosis, coma, infection, gangrene); surgery; severe hepatic disease; renal disease with uremia; cardiovascular collapse, after disease states associated with hypoxemia. **Warning:** Use during pregnancy is to be avoided. Until adequate data on the effects of DBI on the human fetus are available, such use can be considered experimental. **Precautions: Starvation Ketosis,** which must be differentiated from "insulin lack" ketosis, and is characterized by ketonuria in spite of relatively normal blood and urine sugar, may result from excessive DBI therapy, excessive insulin reduction or insufficient carbohydrate intake. Adjustment of DBI-TD or insulin dosage, or supplying carbohydrates, alleviates this state. DO NOT GIVE INSULIN WITHOUT FIRST CHECKING BLOOD AND URINE SUGARS. **Lactic Acidosis:** DBI is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, it is recommended that periodic determinations of ketones in the blood and urine be made in diabetics previously stabilized on DBI, or DBI and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH and the lactate-pyruvate ratio. DBI should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis. **Hypoglycemia:** Although hypoglycemic reactions are rare when DBI is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with DBI. **Adverse Reactions:** Principally gastrointestinal, occurring more often at higher dosage levels; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, DBI should be immediately withdrawn. Although rare, urticaria and gastrointestinal symptoms following excessive alcohol intake have been reported. **Dosage:** 1 to 3 DBI-TD 50 mg. capsules daily. **FSN 6505-724-6331.** **Also Available:** DBI tablets 25 mg. **Supplied:** Bottles of 100 and 1000.

USV PHARMACEUTICAL CORP., Tuckahoe, N.Y. 10707 USV

University of Michigan Department of Postgraduate 1971 - 72 Courses

The following courses are being offered during the 1971-1972 academic year. Further information is available from the Department of Postgraduate Medicine, Towsley Center for Continuing Medical Education, Ann Arbor, Michigan 48104.

SEPTEMBER

8	Medical Legal Investigation
17-18	Modern Below the Knee Amputation Prosthetics (with Kenny-Michigan Rehabilitation Foundation)
23	Seminars in Neoplasia
25	Cardiology Kickoff (with Michigan Heart Assn)

OCTOBER

13	Medical Legal Investigation
19-21	Recent Advances in Cardiology
28-30	Clinical Nuclear Medicine

NOVEMBER

9	E.K.G. Home Study Course begins
11	Seminars in Neoplasia
18-20	Plastic Surgery for General Surgeons

DECEMBER

4	The Anesthetic Management of Emergencies
8	Office Otorhinolaryngology (with the Michigan Academy of General Practice)

JANUARY

14-15	Respiratory Care and Inhalation Therapy
24-28	Family Practice Review (with the Michigan Academy of General Practice)

FEBRUARY

7-10	Advances in Internal Medicine
17	Seminars in Neoplasia
24-26	Management of the Burned Patient

MARCH

9	Cancer Nursing Day (with the Michigan Division, American Cancer Society)
13-14	Endocrine Problems in Surgery
15-17	E.K.G. Diagnosis
21-23	Emergency Room Medicine
22-23	Advances in Pediatrics

APRIL

3- 5	Obstetrics and Gynecology Conference
5	Office Dermatology (with the Michigan Academy of General Practice)
6- 8	Otorhinolaryngology Conference
12	Medical Legal Investigation
20	Seminars in Neoplasia
26-27	Recent Advances in Therapeutics

MAY

3	Medical Legal Investigation
9-11	Coronary Heart Disease
11-13	Ophthalmology Conference

JUNE

12-16	Northern Michigan Summer Course—at Shanty Creek Lodge

Pre-Sate® **(chlorphentermine hydrochloride)**

Caution: Federal law prohibits dispensing without prescription.

Indications

Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications

Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings

When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are o who may become pregnant, and especially those in the firs trimester of pregnancy, requires that the potential benefit b weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalia reproductive and teratogenic studies with high multiples of th human dose have been negative.

Usage In Children Not recommended for use in children unde 12 years of age.

Precautions

In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribin this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician shoul be alert to the individual who may be overly sensitive to thi drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions

Central Nervous System: When CNS side effects occur, the are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache euphoria, dysphoria, and tremor may also occur. Psychoti episodes, although rare, have been noted even at recommende doses. **Cardiovascular:** tachycardia, palpitation, elevation o blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes i libido, impotence. **Autonomic:** dryness of mouth, sweating mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and rarely, difficulty in initiating micturition. **Others:** Paresthesias sural spasms.

Dosage and Administration

The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use i children under 12 not recommended.

Overdosage

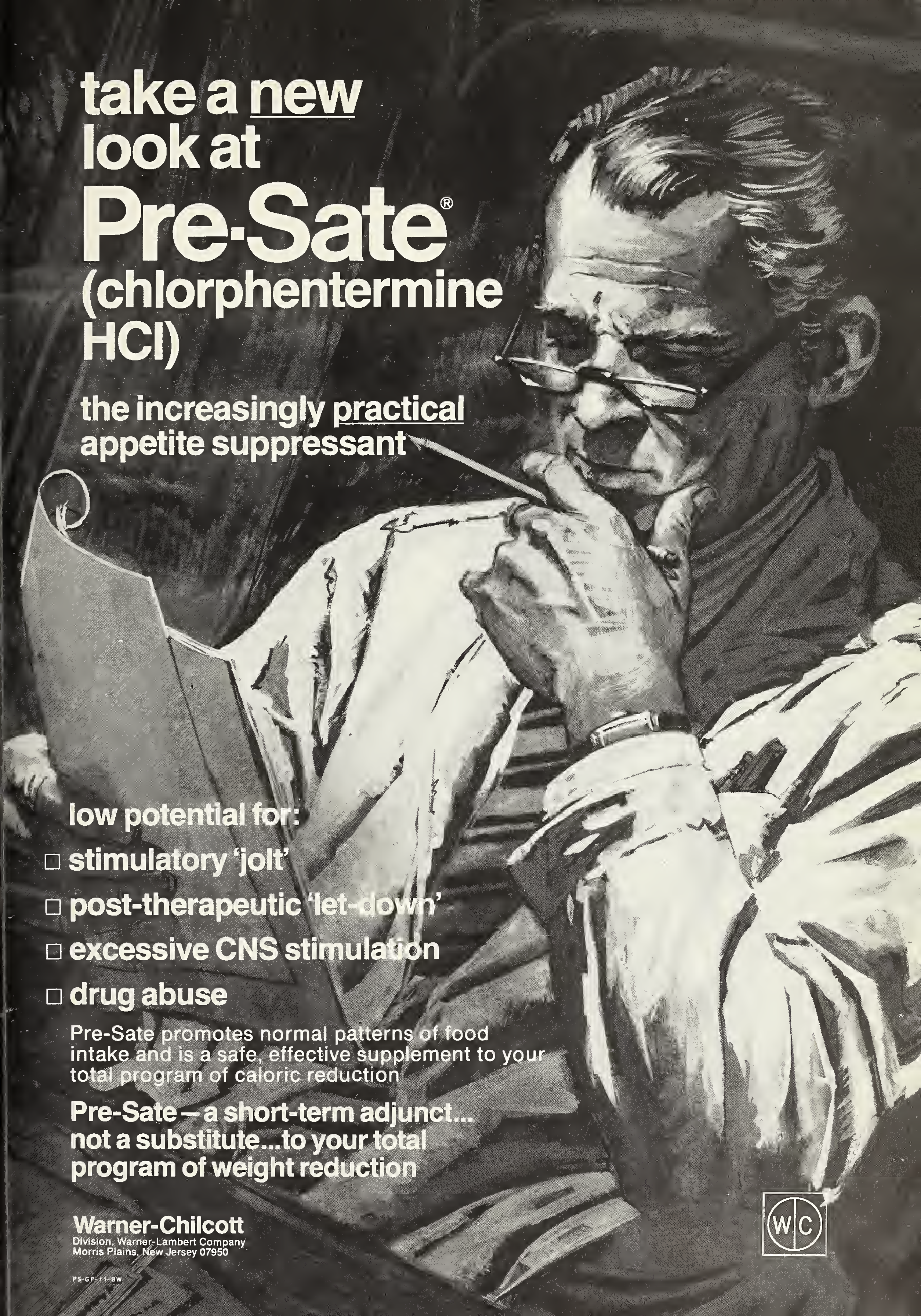
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue an depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotensio and circulatory collapse. Gastrointestinal symptoms includ nausea, vomiting, diarrhea, and abdominal cramps. Fata poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportiv and often includes sedation with a barbiturate. If hypertension i marked, the use of a nitrate or rapidly acting alpha-recepto blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied

Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles o 100 and 1000 tablets.

Full information is available on request.


take a new look at

Pre-Sate®

(chlorphentermine HCl)

the increasingly practical appetite suppressant

low potential for:

- ☐ stimulatory 'jolt'
- ☐ post-therapeutic 'let-down'
- ☐ excessive CNS stimulation
- ☐ drug abuse

Pre-Sate promotes normal patterns of food intake and is a safe, effective supplement to your total program of caloric reduction

Pre-Sate — a short-term adjunct... not a substitute...to your total program of weight reduction

Warner-Chilcott
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

PS-GP-11-BW

Technical and Scientific Exhibitors Take Displays to Annual Session in Grand Rapids

Michigan physicians will walk down a "midway" of colorful and educational exhibits at the 1971 MSMS Annual Session in Grand Rapids Oct. 6-7.

Michigan, national, and international companies will showcase products and techniques ranging from complicated laboratory equipment to baby food, and all of them pertinent to a doctor's practice.

The physician who takes time to study the material at each booth will find the minutes well spent, for much new research will be represented. Time to visit the exhibits will be available during special intermissions.

The leasing of exhibit space makes it possible for MSMS to present the two-day Annual Scientific Session free of charge to the doctor, without requirement of a registration fee. MSMS wishes to express its gratitude to each firm who will be presenting displays. Doctors are urged to ask questions and to personally express appreciation to the exhibitors at each booth.

The Grand Rapids Civic Auditorium also provides room for MSMS to present a number of outstanding scientific exhibits by Michigan doctors, hospitals, and medical schools.

TECHNICAL EXHIBITORS

Abbott Laboratories
Apache Corporation
Astra Pharmaceutical Products, Inc.
Armour Pharmaceutical Company
Automated Management Systems
Ayerst Laboratories
Belle Moss Pharmaceutical Chemist
Black & Skaggs Associates, Inc., Professional Management
Breon Laboratories, Inc.
Bristol Laboratories
Coca-Cola USA
Continental Bio-Clinical Laboratory Service, Inc.
Cooper Laboratories, Inc.
Eaton Laboratories, Inc.
Encyclopaedia Britannica
Ferndale Laboratories, Inc.
Gerber Products Company
Hoechst Pharmaceuticals, Inc.
Homemakers Home & Health Care Services, Inc.
Lederle Laboratories
Eli Lilly & Company
J. B. Lippincott Company
Loma Linda Food Company
Marion Laboratories, Inc.
Mead Johnson Laboratories
Medical Protective Company
Medi-Comp Associates, Inc.
Michigan Association of Collection Agencies
Michigan Bell Telephone Company
Michigan Medical Service
Monarch Life Insurance Company
North American Pharmacal
Ortho Pharmaceutical Corporation
Parke, Davis & Company
J. B. Roerig & Company
Wm. H. Rorer, Inc.
Ross Laboratories
Sandoz Pharmaceuticals
W. B. Saunders Company
Schering Laboratories
G. D. Searle & Company
Standard Process Laboratories, Inc.
Ben P. Stratton Agency, Inc.
The Stuart Company
Thompson Laboratories, Inc.
S. J. Tutag & Company
USV Pharmaceutical Corporation

DONATIONS RECEIVED FROM:

Geigy Pharmaceutical
Smith Kline & French Laboratories

SCIENTIFIC EXHIBITORS

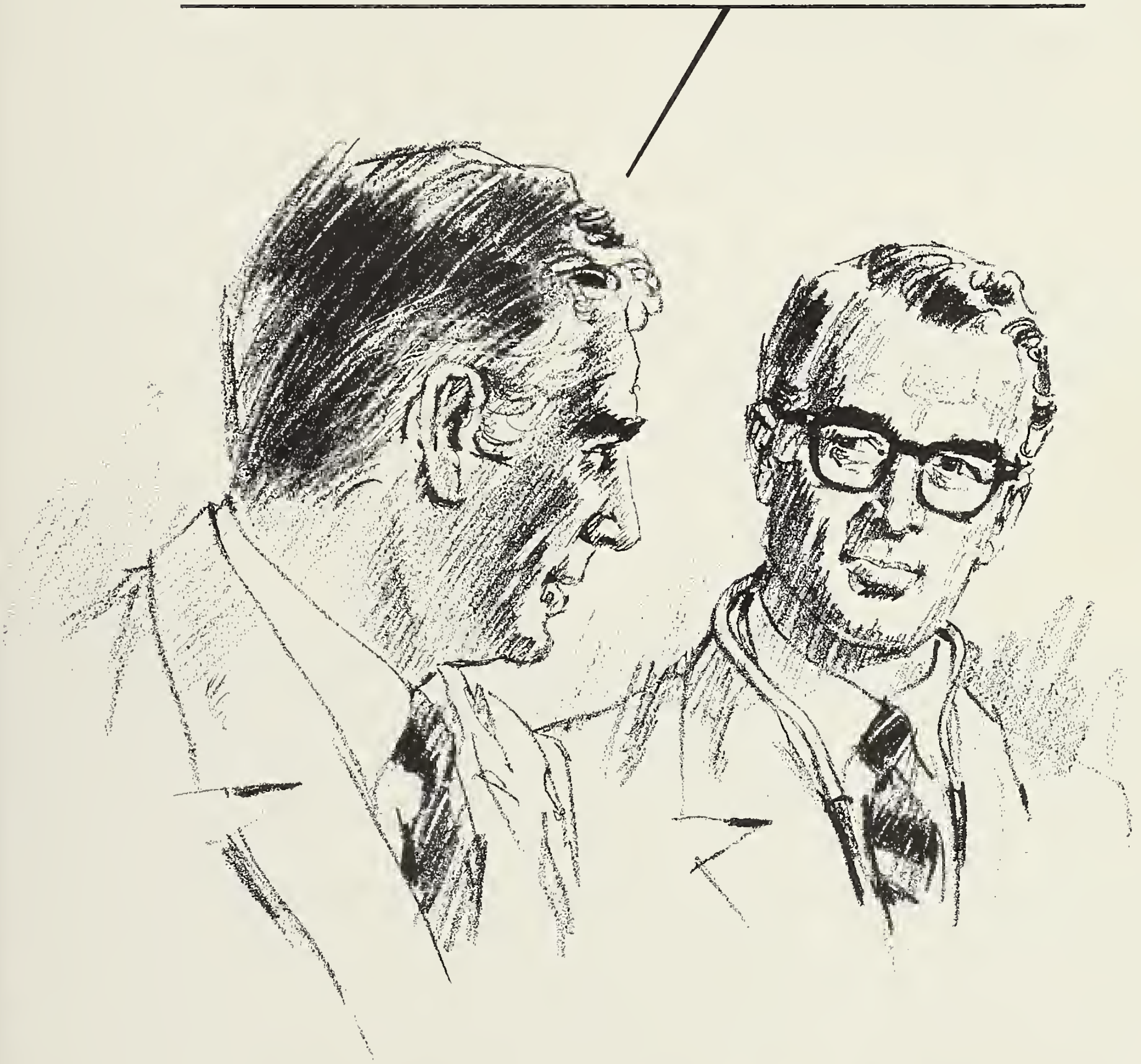
"Fracture of Long Bones with Arterial Injury Due to Blunt Trauma: Principles of Management" sponsored by Roger F. Smith, MD, D. Emerick Szilagyi, MD, Joseph P. Elliott, Jr., MD, and John H. Hageman, MD, Henry Ford Hospital, Detroit

"Woman's Auxiliary—American Medical Association Education and Research Foundation" sponsored by the MSMS Woman's Auxiliary

"The Field Clinic—A Method of Disease Analysis" sponsored by A. B. Swanson, MD, T. J. Waller, MD, G. A. deGroot, MD, N. R. Boeve, MD, and

(Continued on Page 848)

For my patients who need a laxative, I recommend EVAC-U-GEN . . . because it relieves constipation gently . . . particularly important in cardiac and post surgical patients



EVAC-U-GEN® *CHEWABLE VERY PALATABLE ECONOMICAL*

A highly-flavored and palatable tablet of yellow phenolphthalein, bismuth subcarbonate, bismuth subgallate in special base. Chewable. Bottles of 35 and 100. Adult Dose: Chew 1 or 2 tablets night or morning. Children (up to age 10): 1/2 tablet. A citrus drink taken with tablet will stimulate action.

PRECAUTION: Do not use when symptoms of appendicitis are present and discontinue use if skin rash appears. Dependence on laxatives can result from continued use.

WALKER, CORP. & CO., INC. Syracuse, New York 13200

B. Zindel, MD, Blodgett Memorial Hospital, Grand Rapids

"TV-Linked Family Practice of Medicine" sponsored by H. C. Tien, MD, Michigan Institute of Psychosynthesis

"Continuous Cyclic Hormonal Therapy" sponsored by Francis P. Rhoades, MD, Detroit

"Injury to the Ear" sponsored by Philip Metcalfe Binns, MD, and William E. Loechel, AMI, Wayne State University

"Asthma and Exercise" sponsored by the Mary Free Bed Hospital and Rehabilitation Complex, Grand Rapids

"Rehabilitation of Severely Disabled" sponsored by the Mary Free Bed Hospital and Rehabilitation Complex, Grand Rapids

"Successful Restricted Use of Extracorporeal Circulation in Coronary Bypass Surgery" sponsored by Walter H. Janke, MD, Ali A. Esfahani, MD, John L. Brady, MD, McLaren General Hospital and St. Joseph Hospital, Flint

"Medicine and Religion" sponsored by the MSMS Committee on Medicine and Religion and AMA Department of Medicine and Religion

"Michigan Doctors Political Action Committee" sponsored by MDPAC

SOME PHYSICIANS KNOW what to do with their patients who are alcoholics or problem drinkers.

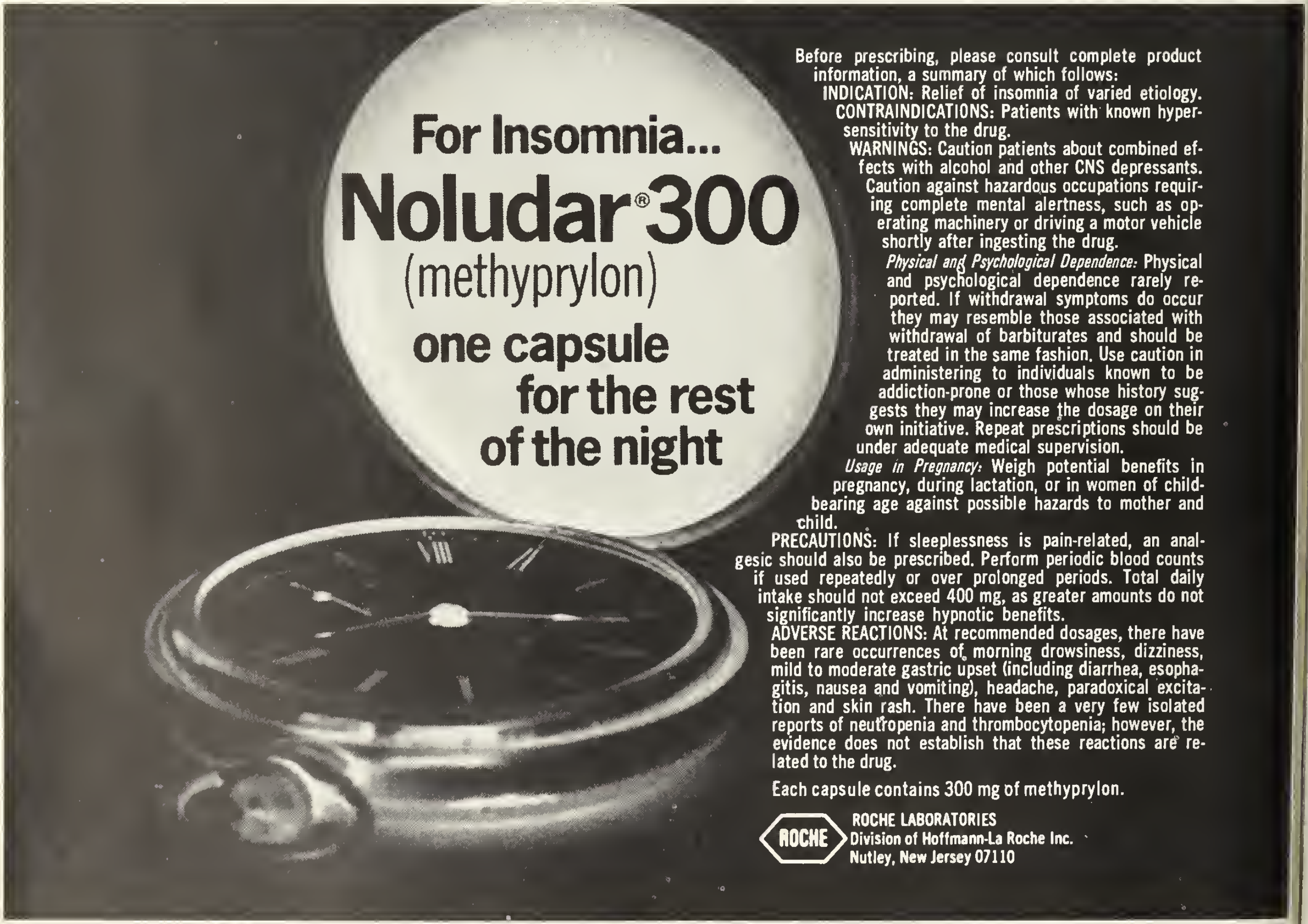
SOME PHYSICIANS WISH they knew what to do with them.

Have you thought of the Alcoholism Services of the Battle Creek Sanitarium Hospital? Since 1965 we have maintained an enviable record in the rehabilitation of the alcoholic or problem drinker.

A full range of services and specialties.

Give us a call
616-964-7121 Ext. 588 or 589

Battle Creek Sanitarium and Hospital
197 N. Washington Avenue
Battle Creek, Michigan 49016



Before prescribing, please consult complete product information, a summary of which follows:
INDICATION: Relief of insomnia of varied etiology.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.
Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of child-bearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

ROCHE
ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

About doctors

Fleming A. Barbour, MD, Flint,
has been named the new president of the Flint Institute of Music. The Flint Institute of Music governs the Flint Symphony Orchestra and organizes other local professional and amateur music activities, among them opera and ballet.

Stanley M. Beck, Jr., MD, Gaylord,
has been appointed acting-superintendent of the Gaylord State Home by E. Gordon Yudashkin, MD, director, Michigan Department of Mental Health. Doctor Beck, a pediatrician, has been acting clinical director at the state facility for the mentally retarded in Gaylord since last October. He formerly practiced in Wayne County and was Southgate health officer for 10 years.

Robert H. Fraser, MD, Battle Creek,
was featured recently in the *Battle Creek Enquirer and News.* "Doctor Bob," 80 years old, has practiced in Battle Creek for 56 years.

Walter W. Sawyer, MD, Hillsdale,
was honored recently at a retirement party given by the employees of the Hillsdale Community Health Center in recognition of his several years of outstanding service.

L. Harold Caviness, MD, Battle Creek,
director of the Battle Creek Sanitarium mental health center, has accepted an appointment to serve as a missionary for two years at the Vellore Christian Medical College and Hospital in southern India. Doctor Caviness will serve as professor in psychiatry to medical students and nurses. He and his family expect to return to Battle Creek. Doctor Caviness came to Battle Creek in 1958 to head the Sanitarium's psychiatric department.

David J. Smith, MD, Grand Ledge,
has been selected by the Mead Johnson Awards Committee of the American Academy of General Practice as a 1971 winner of a $1,200 scholarship award. Doctor Smith was the only Michigan recipient this year for the nationwide scholarship. Scholastic achievement, interest in family practice and leadership qualities are among the criteria used in determining winners. Doctor Smith will receive his award during his graduate training in family practice at Edward W. Sparrow Hospital, Lansing.

(Continued on Page 867)

BRIGHTON HOSPITAL

A non-profit foundation

FOR ALCOHOLISM

Member, Michigan Hospital Association, American Hospital Association

A facility designed to rehabilitate and aid the compulsive drinker in arresting his addiction.

Brighton Hospital meets the standards established by the Michigan State Board of Alcoholism and is recommended by that Board.

12851 East Grand River
One block south of I-96 at Kensington Rd. Exit
four miles east of U.S. 23
Brighton, Michigan
ACademy 7-1211

(A 16-m.m. sound color film on Brighton Hospital is available for free loan to qualified groups.)

This photograph in no way implies an endorsement of Norgesic by Joe Namath

WHEN TRAUMA RESULTS IN PAIN

NORGESIC®

(orphenadrine citrate, 25 mg.; aspirin, 225 mg.; phenacetin, 160 mg.; caffeine, 30 mg.)

the versatile analgesic

offers fast onset of symptomatic relief

produces a high level of analgesia

affords sustained pain relieving action

provides predictable relief—
overall satisfactory response in
approximately 80% of patients

Contraindications: Because of the mild anticholinergic effect of orphenadrine, Norgesic should not be used in patients with glaucoma, pyloric or duodenal obstruction, achalasia, prostatic hypertrophy or obstructions at the bladder neck. Norgesic is also contraindicated in patients with myasthenia gravis and in patients known to be sensitive to aspirin, phenacetin or caffeine.

Since mental confusion, anxiety and tremors have been reported in patients receiving orphenadrine and propoxyphene concurrently, it is recommended that Norgesic not be given in combination with propoxyphene (Darvon®).

Warnings: USE IN PREGNANCY: Since safety of the use of this preparation in pregnancy, during lactation, or in the child-bearing age has not been established, use of the drug in such patients requires that the potential benefits of the drug be weighed against its possible hazard to the mother and child.

USE IN CHILDREN: The safe and effective use of this drug in children has not been established; therefore, the physician must weigh the benefits against the potential hazards.

Precautions: It has been reported that prolonged or excessive use of phenacetin may result in nephrotoxicity. Caution, therefore, should be exercised when Norgesic is administered to patients with renal disorders. It should also be used with caution in patients with tachycardia.

Adverse Reactions: Side effects of Norgesic are those seen with APC or those usually associated with mild anticholinergic agents. These may include tachycardia, palpitation, urinary hesitancy or retention, dry mouth, blurred vision, dilatation of the pupil, increased intraocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, and rarely, urticaria and other dermatoses. Infrequently an elderly patient may experience some degree of confusion. Mild central excitation and occasional hallucinations may be observed. These mild side effects can usually be eliminated by reduction in dosage. One case of aplastic anemia associated with the use of Norgesic has been reported. No causal relationship has been established.

Dosage and Administration: Adults—1 to 2 tablets 3 to 4 times daily.

Riker Laboratories, Inc.
NORTHRIDGE, CALIFORNIA 91324

A SUBSIDIARY OF 3M COMPANY

Norgesic...the versatile analgesic
provides effective analgesia and relief
of associated muscle spasm

In memoriam

Grayson F. Dashiell, MD
Detroit

Grayson F. Dashiell, MD, Detroit, a specialist in internal medicine, died July 5 at the age of 62. Doctor Dashiell, who had offices in Metropolitan Hospital, was a native of Nebraska and had formerly practiced in Illinois. He was graduated from the University of Chicago and received his medical degree from Creighton University, Omaha. He had lived in the Detroit area for 13 years and was a resident of Beverly Hills.

Doctor Dashiell was a former member of the Michigan State Medical Society.

Herbert A. Davis, MD
Allen Park

Herbert A. Davis, MD, an Allen Park ear, nose, and throat specialist, was killed in the crash of a private twin-engine plane June 18. Doctor Davis operated his own clinic in Lincoln Park and was on the staffs of the Wyandotte General, Outer Drive, and Lynn hospitals.

Doctor Davis, a native of Pelham, New York, was graduated from Cornell University's School of Medicine in 1951 and took his internship and surgical residency at Bellevue Hospital. He became a staff member of Lynn Hospital in 1956 and established his own practice three years later.

An Air Force pilot during World War II, Doctor Davis flew transports over "The Hump" in the China-Burma-India theatre. He was awarded the rank of captain and the Distinguished Flying Cross and Air Medal. At the time of his death Doctor Davis was a major and a flight surgeon in the Civil Air Patrol.

A member of the Detroit Otolaryngological Society and the American Academy of Ophthalmology and Otolaryngology, Doctor Davis was a fellow of the American College of Surgeons and was certified by the American Board of Otolaryngology.

Wells B. Fillinger, MD
Ovid

Wells B. Fillinger, MD, former mayor of Ovid and a general practitioner for 50 years, died July 13 at the age of 82. Doctor Fillinger was graduated from Wayne State University. He completed his internship at Detroit Providence Hospital and was on the staff at both Memorial Hospital, Owosso and Clinton Memorial Hospital. Doctor Fillinger had lived in Ovid since 1923 after 10 years in Grand Ledge.

Doctor Fillinger was a captain on the Medical Corps during World War I, past president and founder of Ovid Community Association, and past president of the Shiawassee County Medical Society. He had served on the MSMS Committee on Postgraduate Education.

The family of Doctor Fillinger has requested that memorials be made in his name to the Michigan State University Development Fund.

Lawrence E. Grate, MD
Charlevoix

Lawrence E. Grate, MD, Charlevoix, who had conducted a general practice until ill health forced him to enter semi-retirement in 1967, died July 11 at the age of 57 while visiting in Detroit. Doctor Grate came to Charlevoix in 1946 and conducted a limited practice in Ellsworth for the past 10 months.

A graduate of the Wayne State Medical School, he had entered the U.S. Navy upon completion of his studies and served as a medical officer during World War II. He established his practice with G. B. Saltonstall, MD, upon termination of his Navy duties. Doctor Grate was also a past president of the Mt. McSauba Recreation Association.

Doctor Grate's family suggests that anyone wishing to honor his memory may contribute in his name to the Charlevoix Hospital.

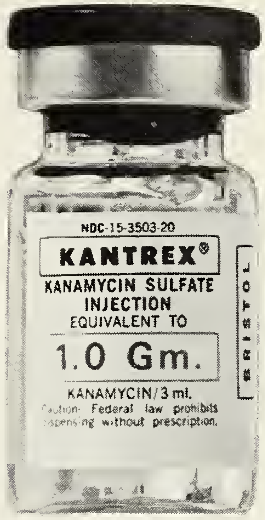
Jesse J. Hendren, MD
Fowlerville

Jesse J. Hendren, MD, Fowlerville, former physician and active participant in local Fair Board, livestock and educational activities, died July 16 in a Lansing hospital at the age of 78.

A former president of the American Aberdeen Angus Society, Doctor Hendren was also past president of the Fowlerville Fair Board and of the Fowlerville Board of Education. In addition he

(Continued on Page 854)

On formulary and in the pharmacy...



take
advantage
of the
Kantrex®
KANAMYCIN SULFATE
experience

A dozen years of Kantrex usage have established its efficacy, its versatility, its simplicity.

And its economy.

Faced with a life-threatening infection, the physician cannot conscionably consider economy a primary factor in selection of an appropriate antibiotic. However, when susceptibility reports are in, the infecting pathogens are often found to be susceptible to several antibiotics. The physician may then consider dose requirements and cost in his prescribing decision.

Kantrex requires one simple standardized dose for almost any patient with any susceptible mixed Gram-negative/staph infection (Pseudomonas are resistant). The usual adult daily dose of Kantrex is only 1.0 Gm.... and the usual total course of therapy, 7-10 Gm. Translated to dollars and cents, the daily cost of Kantrex therapy may be only 1/2 to 1/8 that of therapy with other parenteral antibiotics used for serious hospital infections.

Doesn't it make good sense to use Kantrex?

Experience proves it does.

RIEF SUMMARY OF PRESCRIBING INFORMATION
) 7/8/70
or complete information, consult Official Package Circular.

Warning: Irreversible deafness can occur. Tinnitus or vertigo may also occur and indicate vestibular damage and impending deafness. The risk is sharply increased with renal dysfunction. In such cases, decrease size and frequency of doses. Discontinue kanamycin and check hearing if azotemia increases. Watch carefully for ototoxicity in older patients and patients receiving more than 15 Gm of kanamycin. To avoid neuromuscular paralysis with respiratory depression, postpone intraperitoneal instillation in post-operative patients until recovery from anesthesia and muscle relaxants is complete. Avoid concurrent use of other ototoxic drugs including ethacrynic acid. Safety in pregnancy is not established.

dications: Serious infections due to susceptible strains of *E. coli*, Proteus sp.,
nterobacter aerogenes, *K. pneumoniae*, *Serratia marcescens* and *Mima-*
erellea. Culture and sensitivity studies should be performed.
ontraindications: A history of hypersensitivity to the drug. Prior auditory dam-
je by kanamycin or other agents may be a contraindication if effective alterna-
e therapy is available.
ecautions: Obtain audiograms before and during therapy in patients with renal dysfunction when treatment lasts more than 5 days. Stop Kantrex if tinnitus or hearing loss occurs. Hydrate patients to prevent chemical irritation of the renal tubules. Assess renal function periodically, both before and during therapy. If signs of renal irritation occur (casts, cells, proteinuria) increase hydration and reduce the dosage or the frequency of dosage if necessary – in azotemic patients the frequency (in hours) of doses may be obtained by multiplying the serum creatinine by 9. If azotemia or oliguria occur, discontinue therapy. Mycotic or bacterial superinfection may occur.

Adverse Reactions: Irritation or pain at the injection site, skin rash, drug fever, headache and paresthesias.

Dosage and Administration: The maximum total daily dose should not exceed 1.5 Gm. by all routes of administration. The usual dose is 7.5 mg./Kg./12 hours I.M. The average adult dose is 1 Gm. daily. Uncomplicated infections due to sensitive organisms should respond in 24 to 48 hours.

If no response occurs in 3 to 5 days, stop therapy and recheck the bacterial sensitivities. Hydrate patients well to minimize renal irritation. Inject deeply into the upper outer quadrant of the gluteal muscle. Discard partially used vials after 48 hours. The drug should not be physically mixed with other antimicrobials.

Supplied: Rubber capped vials as a ready-to-use sterile aqueous solution in two concentrations: 0.5 Gm. in 2 ml. and 1.0 Gm. in 3 ml. Also available – Pediatric Injection 75 mg. in 2 ml.

A.H.F.S. Category 8:12.28

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

served as president of the Livingston County Medical Society and was affiliated with Fowlerville Masonic Lodge No. 164 and the Howell Knights Templar.

Doctor Hendren was graduated from the University of Tennessee Medical School in 1917. His family has requested that memorial contributions be made to the Michigan Tuberculosis and Respiratory Disease Association, Lansing.

Hubert R. John, MD
Bloomfield Hills

Hubert R. John, MD, former physician who practiced in Detroit, died July 15 in Beaumont Hospital at the age of 77. Doctor John was medical director of the Alexander Insurance Company and the Maccabees Insurance Company and formerly had offices in the Northland Medical Building. He was on the staffs of Women's, Grace, and Brent Hospitals.

A 1916 graduate of the University of Michigan Medical School, Doctor John studied in Vienna and then returned to Detroit to practice. A founder of Galens Medical Fraternity, he was a World War I veteran.

Leo A. Jordan, MD
Saginaw

Leo A. Jordan, MD, former Saginaw physician, died July 12 in Saginaw after a brief illness at the age of 66. Born in Harvey, North Dakota, Doctor Jordan was graduated from Loyola Medical School and had practiced in Saginaw for 33 years, before retiring in 1970.

Doctor Jordan was a member of the Saginaw County Medical Society, the local and national divisions of the American Academy of General Practice, and the Michigan State Medical Society.

Joseph G. Zimmerman, MD
Traverse City

Joseph G. Zimmerman, MD, Traverse City physician, died June 21 at his home at the age of 72. A native of Traverse City, Doctor Zimmerman was graduated from the University of Michigan, and Wayne State University Medical School. He belonged to the First Congregational Church in Traverse City and had served in the U.S. Navy during World War I.

Doctor Zimmerman's family requested that friends direct memorials to Northwestern Michigan College, the Coronary Care Unit of Munson Center or to any memorial fund of their choice.

WE HELP YOU KEEP MOM IN THE PICTURE...

A Fast, Quality-Controlled Pap Screening Service Is Important

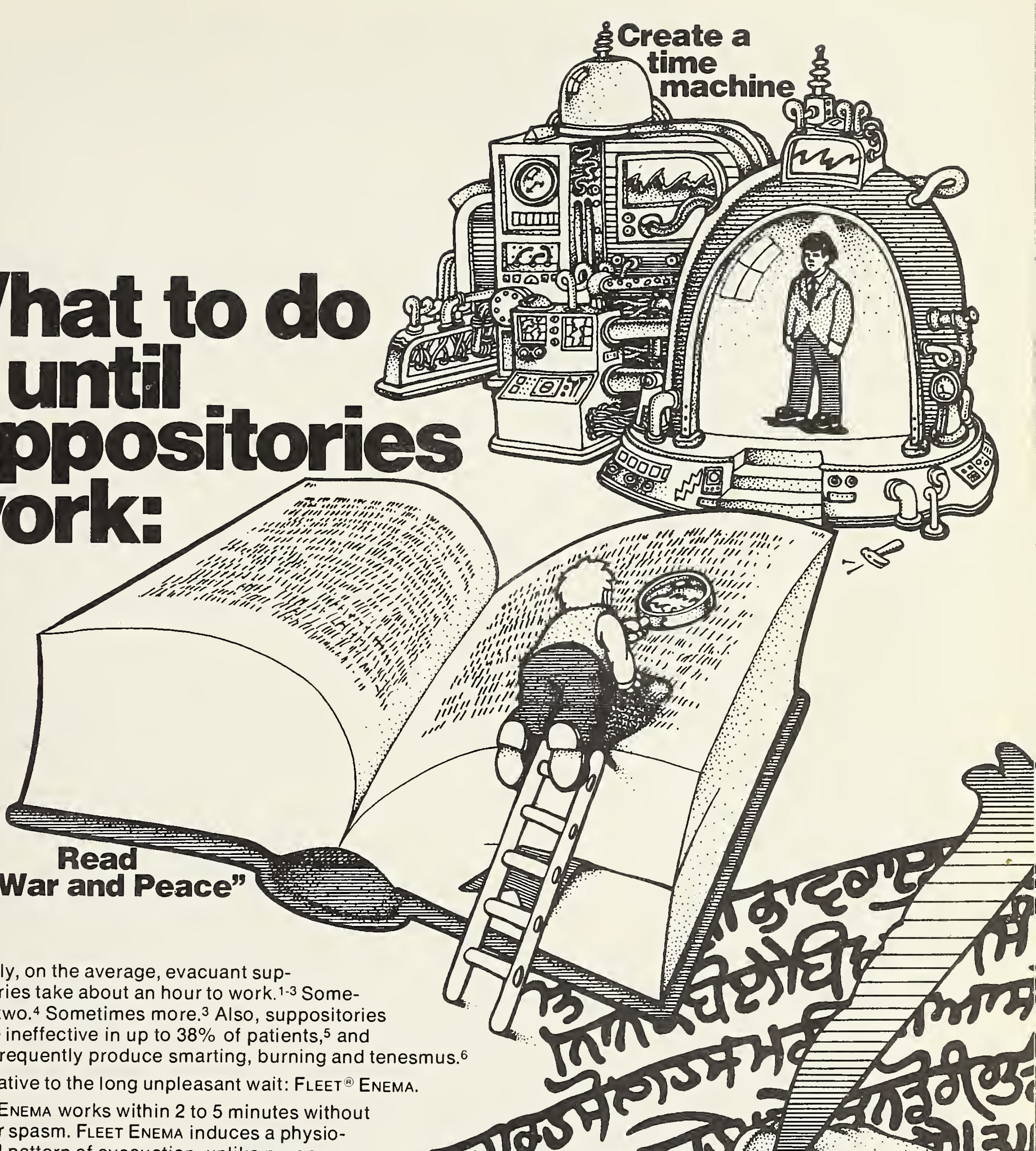
- For physicians interested in cancer prevention through quality Pap smear tests
- Over 80 years of staff experience
- Quality control with rapid service
- Attractive prices because of high volume
- Hormonal evaluation incuded at no extra charge

Send for your free introductory packet

Please Print
NAME__________
ADDRESS__________
CITY__________
STATE__________ ZIP__________

Cytology Laboratory
NATIONWIDE CANCER SCREENING SERVICE
P.O. Box 455, Corona del Mar, California 92625

What to do until suppositories work:

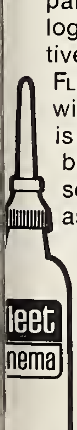


Actually, on the average, evacuant suppositories take about an hour to work.[1-3] Sometimes two.[4] Sometimes more.[3] Also, suppositories can be ineffective in up to 38% of patients,[5] and not infrequently produce smarting, burning and tenesmus.[6]

Alternative to the long unpleasant wait: FLEET® ENEMA.

FLEET ENEMA works within 2 to 5 minutes without pain or spasm. FLEET ENEMA induces a physiological pattern of evacuation, unlike purgatives and laxatives that may liquefy the stool. FLEET ENEMA avoids the irritation common with soapsuds enema. And FLEET ENEMA is leakproof: a rubber diaphragm at the base of the prelubricated tube prevents seepage and controls the rate of flow, assuring comfortable administration.

FLEET ENEMA. Regular and pediatric. Both completely disposable—like suppositories, only better. Much better.



C. B. FLEET CO., INC.
Lynchburg, Va. 24505

Fleet
pharmaceuticals

Warning: Frequent or prolonged use of enemas may result in dependence. Take only when needed or when prescribed by a physician. Do not use when nausea, vomiting or abdominal pain is present.
Caution: Do not administer to children under two years of age unless directed by a physician.

References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964.

F19A71

Coller-Penberthy-Thirlby Conference Continues Medical Tradition

The July 29 meeting of the Annual Coller-Penberthy-Thirlby Medical Conference, now in its 51st year, reflected the ideals of the men who initiated it while simultaneously startling its audience of 300 physicians.

C. Allan Barnes, MD, vice-president of biomedical affairs of the Rockefeller Foundation, told his audience that their concerns about cancer, underdeveloped children and heart disease, while legitimate, were by comparison "unimportant" when compared with population problems. According to Doctor Barnes, as long as man is locked into this finite world with no prospect of adding new foodstuffs, space or minerals to his existence, the world will simply poison itself into oblivion. Further, Barnes added, "We must move to a point of 'zero population growth,' otherwise we face extinction." The Rockefeller scientist predicted a time when population growth and family size will become a matter of legal control.

The Traverse City conference has a rich history. The conference was initiated in 1921 when Frederick A. Coller, MD, newly-appointed to the Department of Surgery, University of Michigan Medical School, discovered that some doctors of Michigan expressed resentment against the University Hospital as being in direct competition in medical practice. Believing that a state medical school could exist and become great only through full cooperation with the medical profession of that state, Doctor Coller arranged a number of meetings with county medical societies. Thus Doctor Coller met Edwin L. Thirlby, MD, of Traverse City, who had made arrangements for a social day of fishing and dining to be followed by medical talks the next day.

Medical society members in attendance at these initial meetings became convinced that the Ann Arbor physicians were dedicated to teaching and totally interested in advancing medical knowledge and skills among Michigan doctors. Doctor Coller, for his part, found a group of doctors eager to learn more medical knowledge and techniques and appreciative of his efforts and interest.

This first meeting in 1921 resulted in a long and close friendship between Doctors Coller and Thirlby and in the joint belief that the outstate physicians wanted a continuing educational program to bring to them knowledge of medical advances and that the University was extremely well equipped to supply this knowledge. Doctor Coller also recognized that he had the opportunity to observe closely and evaluate the results of postgraduate training. From time to time the program was changed in character. Emphasis was placed on common disease conditions, information was brought to the group regarding research at the University, speakers were invited from the U-M, Wayne State University School of Medicine, and occasionally from other parts of the country.

Grover C. Penberthy, MD, Detroit, became an enthusiastic supporter and promoter of the conference from its inception.

A number of years ago this postgraduate teaching program was formally entitled the Annual Coller-Penberthy-Thirlby Medical Conference in honor of its founders and enthusiastic sponsors. Without question, the Annual Coller-Penberthy-Thirlby Medical Conference is a major contribution to the high standard of medical care which the people of the Traverse City area receive.

HOSPITAL-MEDICAL PLANNING, INC.
Alca Universal Building
East Lansing, Michigan
48823
517 332-1333

PROFESSIONAL PERSONNEL RECRUITMENT
FOR
HOSPITALS CLINICS UNIVERSITIES
Administrators, Physicians, Dept. Heads

ATTENTION: MEDICAL GROUPS

We welcome inquiries from all Medical Groups in Michigan who need additional physicians. Our specialized recruitment program regularly turns up men interested in a good situation in the Great Lakes States or another part of the country. By presenting a variety of opportunities in Michigan to these men, we can assist in meeting Michigan's needs. We work with only the best men. Write or call Arthur A. Lepinot.

WANTED: MEDICAL DIRECTOR

Resumes are welcome from physicians of all specialties. There is no financial obligation to the individual physician. We are searching for men in all specialties for excellent appointments available in Groups, Clinics, Hospitals, and Universities in the Great Lakes Region. We are now looking for a Medical Director for a hospital and also for a large steel company employing 11,000 people. An excellent position. Send your resume or call Arthur A. Lepinot.

How can a car have two trunks?

It's easy when there's no engine in front or back.

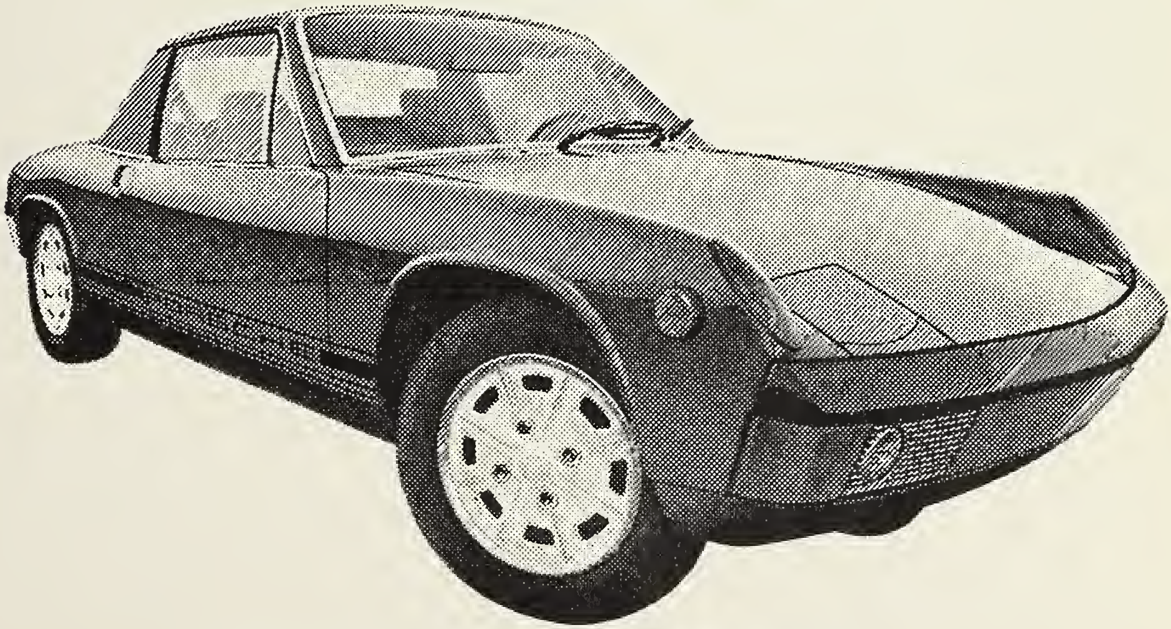
The engine is in the middle. Just in front of the rear axle.

This enables our car to hold the road better, corner surer and brake smoother than just about every other car in the world.

It also means you get two trunks. One behind the engine with 7 cubic feet of space. The other in front of the driver with 9 cubic feet of space.

We'd like you to come in and drive the mid-engine Porsche 914.

We're sure you'll be very impressed.



Porsche Audi: a division of Volkswagen

Villiams Porsche Audi
24 E. Grand River Ave., Lansing

Traverse Motors, Inc.
1301 Garfield Ave., Traverse City

Tom Sullivan Porsche Audi Co.
499 S. Hunter Blvd., Birmingham

Wood Imports, Inc.
15415 Grotiot Ave., Detroit

Prestige Automobiles, Inc.
2955 S. Division Ave., Grand Rapids

WILLINGWAY

311 JONES MILL ROAD
STATESBORO, GEORGIA

TELEPHONE
(912) 764 - 6236

LONG TERM THERAPY OF DRUG DEPENDENCY CONDITIONS

Willingway Hospital is a new facility, the first complete hospital to be constructed under the Georgia Hospital Rules and Regulations, revision of November 24, 1969, authorizing residential type units.

Located at the city limits in east Statesboro on an eleven acre tract of woodland in a quiet, secluded area containing a lake, the single story, multi-level hospital consists of a detoxification section and a residential care section. The detoxification unit is equipped and staffed for the withdrawal treatment of any type of intoxication including alcohol, narcotics, sedatives, tranquilizers and other drugs or combinations.

The residential care unit is composed of 26 private rooms with private baths convenient to a comfortable lounge and arranged to achieve an intimate homelike atmosphere. All living units are individually decorated and furnished. No two are alike. Wall to wall carpet throughout.

There is a large day room, inside and outside patios, a dining room where home cooked meals are served, a library and conference rooms. The building is all electric, completely air conditioned with individual controls, and is protected by a modern sprinkler system in all areas.

Male and female patients are admitted to the detoxification unit for withdrawal. When this phase is completed, they are transferred to the residential care unit for continuation of rehabilitative therapy.

The Willingway treatment program operated successfully at another location in Statesboro for four years before moving to the new facility.

Requirements for admission. To be admitted all new patients must agree to the following:

1. Stay 28 days.
2. No telephone calls.
3. No visitors.
4. No automobiles.
5. Pay for 28-day program at time of admission.

Incoming and outgoing mail is not restricted. Mail is not read or censored. No one is admitted for detoxification only.

For rates and information write to:

WILLINGWAY
P. O. Box 508
Statesboro, Ga. 30458

John Mooney, Jr., M.D.
Medical Director

Mrs. Dorothy R. Mooney
Administrator

Member Georgia Hospital Association

DARVON®
COMPOUND-65
65 mg. propoxyphene hydrochloride, 227 mg. aspirin, 162 mg. phenacetin, and 32.4 mg. caffeine
Lilly H06

Additional information available to the profession on request.
Eli Lilly and Company • Indianapolis, Indiana 46206

Lilly

101488

gastritis

vhen
-I symptoms
lemand
potent
ynthetic
nticholinergic

move up to
"the Robinul
response"

In treating hypersecretion and hypermotility associated with gastritis are you disappointed in the results you've been getting with some of the synthetics? Then *move up* to a potent anticholinergic—Robinul® Forte (2 mg. glycopyrrolate). It provides prompt, pronounced, prolonged suppression of gastric hypersecretion, making it a highly effective agent in gastritis and other upper G-I conditions associated with hypersecretion and hypermotility. Because Robinul Forte exerts a profound antispasmodic action, it is also useful in the treatment of lower G-I disorders, such as functional bowel distress and spastic and irritable colon. If the patient has a "one tract mind" concerning his condition, you can help control the anxiety and tenseness by prescribing Robinul®-PH Forte (2 mg. glycopyrrolate with 16.2 mg. phenobarbital —warning: may be habit forming).

Robinul® 2mg.
Forte (glycopyrrolate)

NDICATIONS Robinul Forte (glycopyrrolate, 2 mg.) and Robinul-PH Forte are double-strength dosage forms of glycopyrrolate. They are primarily
cated for patients who are less responsive to anticholinergic therapy and for control of the more prominent symptomatology associated with
e episodes of gastrointestinal disorders. Emphasis should be on total management, with due consideration of the various therapeutic modalities
lable, including diet, antacids, anticholinergic agents, sedatives, and attention to emotional problems. Accordingly, glycopyrrolate is recom-
ded in the management of gastrointestinal disorders amenable to anticholinergic therapy, such as: (1) duodenal ulcer, duodenitis, pylorospasm;
gastric ulcer, gastritis, esophageal hiatal hernia, hyperchlorhydria, pyrosis, aerophagia, gastroenteritis; (3) esophagitis; (4) cholecystitis, chronic
creatitis; (5) spastic and irritable colon, ulcerative colitis, functional bowel distress, diverticulitis, acute enteritis, diarrhea; and (6) splenic flexure
drome, neurogenic gastrointestinal disturbances. When these conditions are associated with psychic overlay, the formulation with phenobarbital
be indicated. ■ **CONTRAINDICATIONS** Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric reten-
prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH
e (glycopyrrolate with phenobarbital), sensitivity to phenobarbital. ■ **PRECAUTIONS** Administer with caution in the presence of incipient
coma. ■ **SIDE EFFECTS** The most frequent side effect noted during clinical trials was dry mouth. Thirty-three (3.3%) of 1,009 patients receiving
32 mg. of glycopyrrolate a day complained of dry mouth of moderate to severe degree, but only 11 discontinued treatment because of this.
red vision, constipation, and urinary hesitancy have been reported infrequently. Other side effects associated with the use of anticholinergic
is include: tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsi-
, and rash. ■ **DOSAGE** The average and maximum recommended dose of Robinul Forte (glycopyrrolate, 2 mg.) or Robinul-PH Forte is one
et three times daily (in the morning, early afternoon, and at bedtime). To obtain optimum results, dosage should be adjusted to the individual
ent's response. After the more severe symptoms associated with acute conditions have subsided, the dose may be reduced to the minimum
ired to maintain symptomatic relief. ■ **SUPPLY** Robinul Forte (glycopyrrolate, 2 mg.) is available as scored, compressed pink tablets engraved
/2 in bottles of 100 and 500. ■ Robinul-PH Forte (glycopyrrolate, 2 mg., with phenobarbital, 16.2 mg.) is available as scored, compressed blue
ets engraved AHR/2 in bottles of 100 and 500.

A. H. Robins Company, Richmond, Va. A-H-ROBINS

You can't fell a redwood with a hatchet

With vitamins, too, relative needs determine the choice.

A low potency vitamin formula may be "a good thing." But when the need for vitamins is great, only a *high potency formula* will do.

THERAGRAN is often indicated as a high potency vitamin formula pre- and postoperatively, and in many patients with: arthritis, diabetes, pancreatitis, infectious disease, hepatic disease, cardiac disease, degenerative disease, osteoporosis, alcoholism, dermatologic conditions, psychiatric disorders, malabsorption syndrome, peptic ulcer, ulcerative colitis, other gastrointestinal disease, and during the menopause. Also available with minerals as THERAGRAN-M.

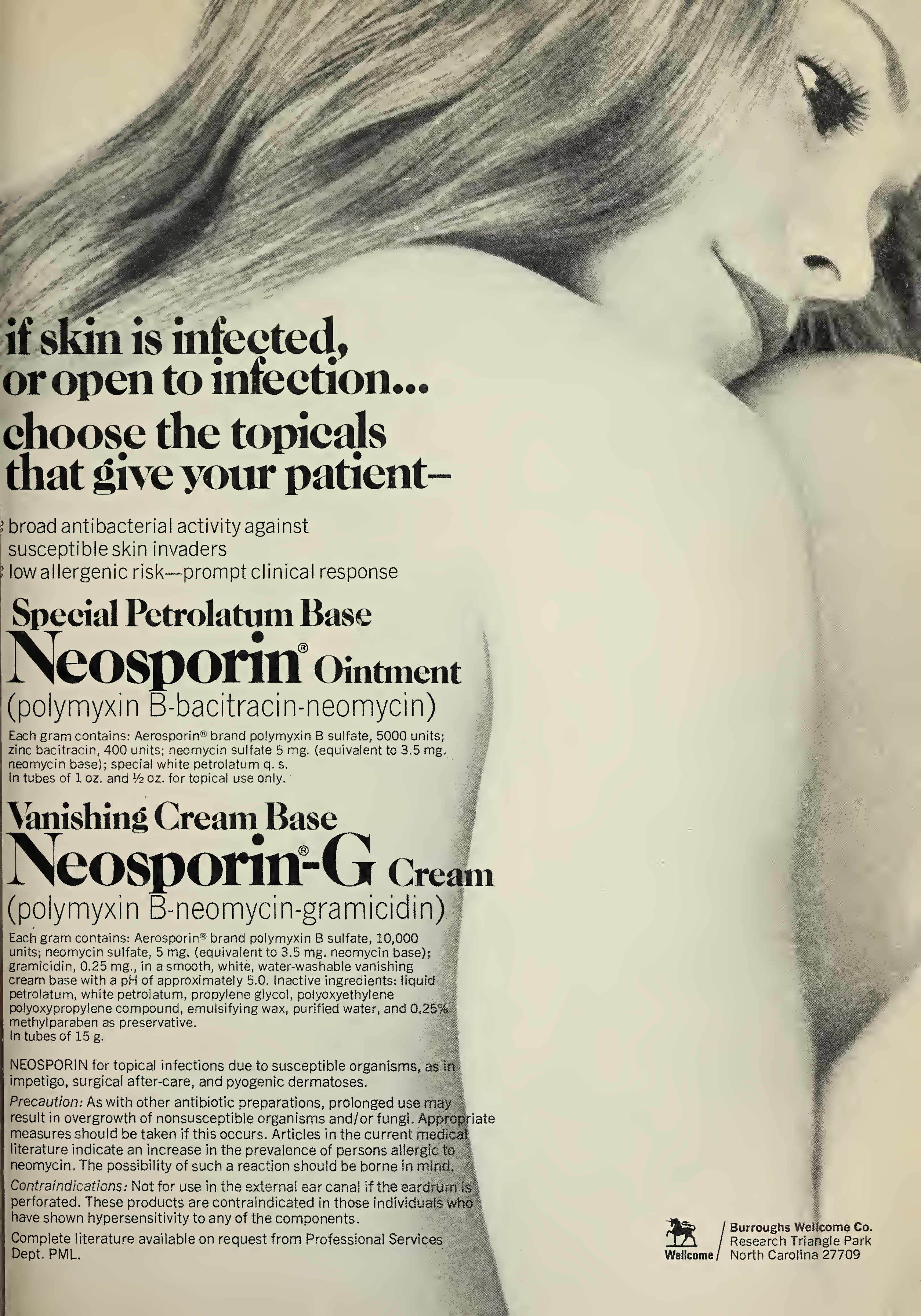
Theragran®
High Potency Vitamin Formula

Theragran®-M
High Potency Vitamin Formula with Minerals

THERAGRAN TABLETS AND LIQUID CONTAIN 600% OF THE MINIMUM DAILY ADULT REQUIREMENT OF VITAMIN C.

SQUIBB
'The Priceless Ingredient of every product is the honor and integrity of its maker.'™

© E.R. Squibb & Sons, Inc. 1970



if skin is infected, or open to infection... choose the topicals that give your patient—

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base Neosporin® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base Neosporin®-G Cream

(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

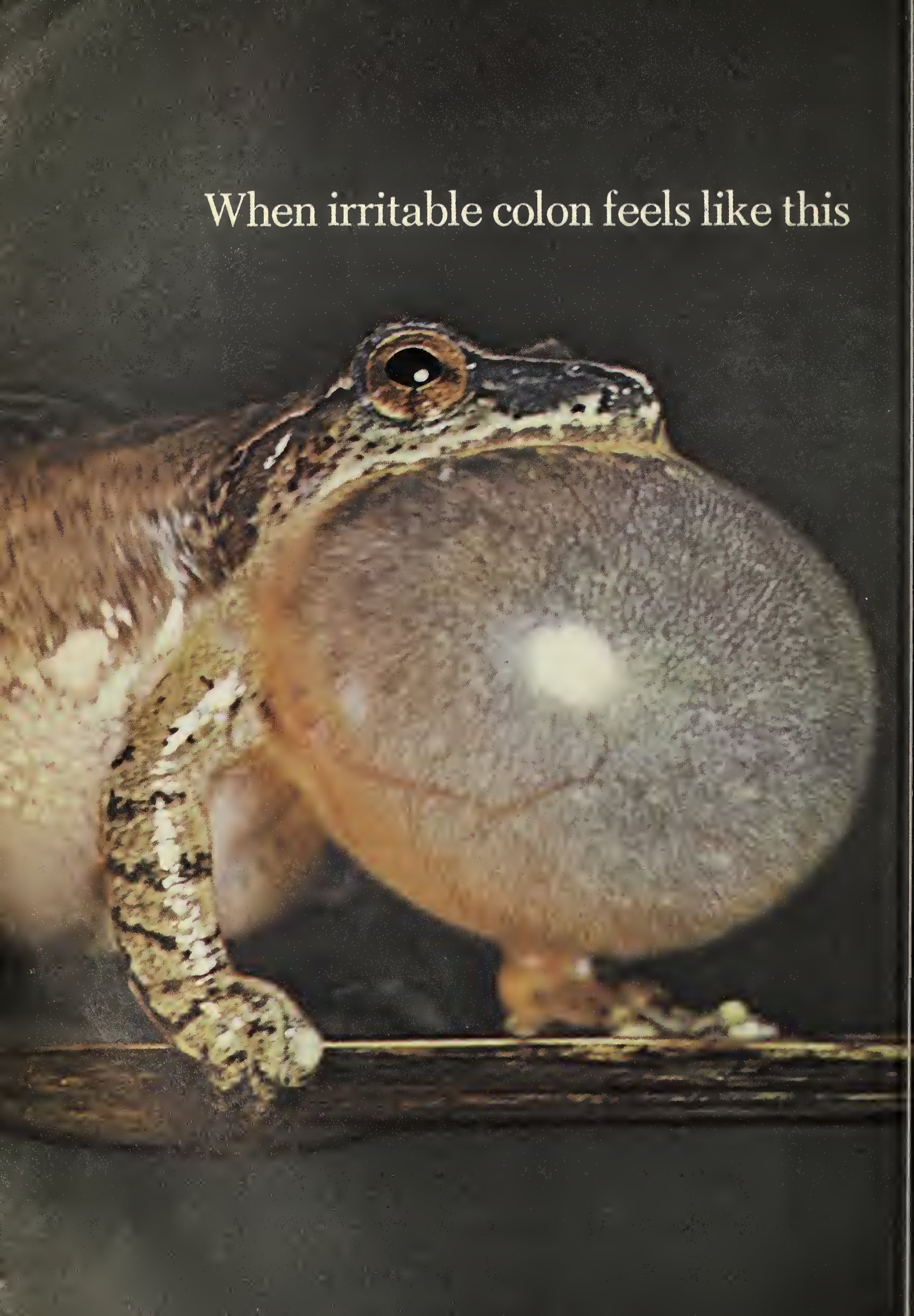
NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

Wellcome / **Burroughs Wellcome Co.**
Research Triangle Park
North Carolina 27709


When irritable colon feels like this

..in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ **belladonna alkaloids—for the hyperactive bowel**
- ☐ **simethicone—for accompanying distension and pain due to gas**
- ☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.

Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.

Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.

Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.

Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®
antispasmodic/sedative/antiflatulent

pring peeper (tree frog, *Hyla crucifer*):
iis small amphibian can expand
s throat membrane with air until it is
vice the size of its head.

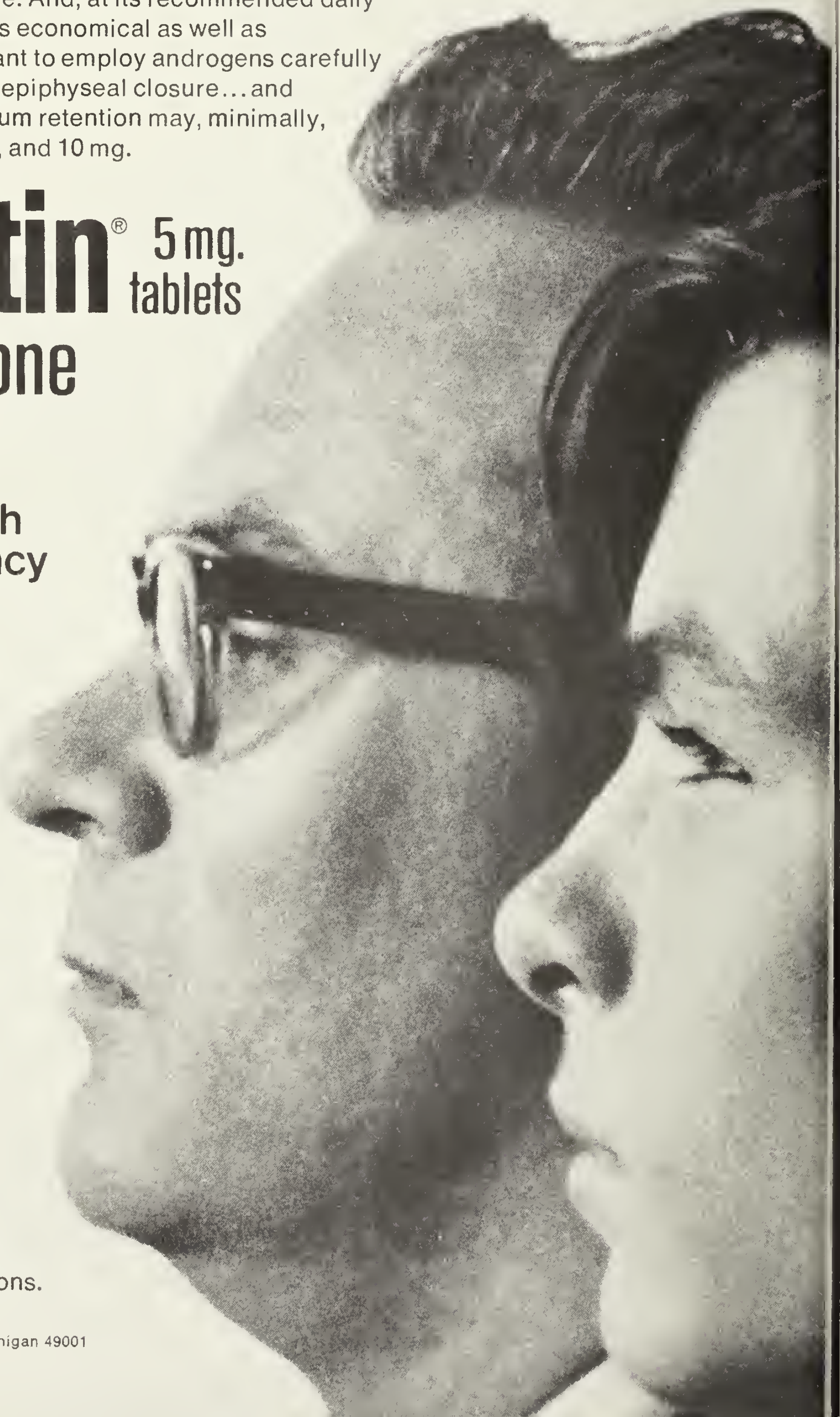
when manhood ebbs.. or is delayed due to testicular hormonal insufficiency

What nature denies, Halotestin may replace. That's the purpose of this orally active androgen in conditions such as impotency, eunuchoidism, and eunuchism. The most widely used agent of its kind, Halotestin is replacement therapy with approximately five times the potency of oral methyltestosterone. And, at its recommended daily dosage of 2 to 10 mg., Halotestin is economical as well as convenient. Of course, you will want to employ androgens carefully in young boys to avoid premature epiphyseal closure... and in the elderly where possible sodium retention may, minimally, precipitate edema. Tablets of 2, 5, and 10 mg.

Halotestin® 5 mg. tablets

(fluoxymesterone Upjohn)

oral replacement with parenteral-like potency



Please see facing column for summary of contraindications, precautions, and adverse reactions.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Halotestin®
(fluoxymesterone, Upjohn)

Orally active androgen about 5 times as potent in anabolic and androgenic activity as methyltestosterone. Halotestin (fluoxymesterone) induces significant retention of calcium and potassium, but retention of sodium not marked. Doses below 20 mg. daily have little effect in producing creatinuria.
Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, agnogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.
Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.
Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.
Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.
Supplied *Tablets: 2 mg.*, scored—bottles of 100./ *5 mg.*, scored—bottles of 50./*10 mg.*, scored—bottles of 50.
For additional product information, see your Upjohn representative or consult the package circular.

Upjohn The Upjohn Company, Kalamazoo, Michigan
JA68-7627-R MED B-5-S (LQX)

William H. Alexander, MD, Iron Mountain, was honored at a dinner given by the Dickinson-Iron County Medical Society in recognition of his years of distinguished service to the community. A capacity crowd watched the presentation to Doctor Alexander of a portrait of himself which will be placed in the Memorial Hospital. Doctor Alexander had served the area for 46 years, having come to Iron Mountain in 1925 with the Ford Motor Company in charge of Ford's medical program in the Upper Peninsula. Mrs. Alexander also was cited at the dinner by the Auxiliary of the Dickinson-Iron Mountain County Medical Society. She was made an honorary lifetime member of the Auxiliary.

James J. McClendon, MD, Detroit, received the "Alumnus of the Year" award at the recent annual banquet at Atlanta University. The occasion also marked the 50th anniversary of Doctor McClendon's graduation from the university. Doctor McClendon is a staff member at Hutzel Hospital, former president of the Detroit NAACP, board member of the National NAACP, and president of the Detroit Board of Health.

Hugh M. Jardine, MD, West Branch, was the recipient of the Distinguished Service Award presented by the West Branch Area Jaycees on June 12, which had been designated "Dr. Jardine Day in West Branch." The day's festivities were highlighted by a testimonial luncheon which was open to the general public. Doctor Jardine moved to West Branch in 1928 and has been practicing medicine there ever since.

Charles G. Child, III, MD,
Jerome W. Conn, MD,
Avedis Donabedian, MD,
are members of the National Academy of Sciences' new Institute of Medicine, an organization which hopes to be vigorous and aggressive in confronting health issues important to the nation. The institute became active last December with 110 members. One of the feasibility studies which the institute will sponsor will compare the effectiveness of various health delivery systems, among them group practice, solo private practice, and community health centers. Doctor Child is chairman and professor, U-M department of surgery; Doctor Conn is professor of internal medicine and head of the division of endocrinology and metabolism, U-M department of internal medicine, and Doctor Donabedian is professor of medical care organization, U-M School of Public Health.

Speakers to discuss Contemporary Society and Physician At Annual Session, Oct. 6-7

Twenty-three presentations will be offered at the forthcoming 106th annual MSMS Scientific Session, scheduled for October 6 and 7 at Grand Rapids. The theme is "Our Contemporary Society: Its Problems for the Physician." Guest speakers will gather from various points of the U.S. such as Phoenix, Boston, Dallas, and New York City. Presentations and speakers as this issue goes to press are:

Wednesday, October 6

TREATMENT OF DRUGS AND ALCOHOL ABUSE (9-10:15 a.m.)

Richard C. Bates, MD, Moderator, *Chairman of MSMS Committee on Alcohol and Drug Dependence;* Donald A. Damstra, MD, *Director, Alcohol and Drug Abuse, St. Luke's Medical Center, Phoenix;* Herbert A. Raskin, MD, *Adjunct Associate Professor of Psychiatry and Chairman, AMA Committee on Alcoholism & Drug Dependence.*

THE CHANGING SPECTRA OF INFECTIONS (9-10:15 a.m.)

A. Martin Lerner, MD, Moderator, *Professor of Medicine, WSU School of Medicine, and Hutzel Hospital Medical Unit;* Frank Cox, Jr., MD, *Division of Infectious Diseases, Henry Ford Hospital, Detroit;* Francis M. Wilson, MD, *Asst. Professor of Medicine, Division of Infectious Diseases, WSU School of Medicine.*

25 YEARS OF EXPERIENCE WITH CHEMOTHERAPY IN RENAL TUBERCULOSIS (9-10:15 a.m.)

John K. Lattimer, MD, *Professor and Chairman, Department of Urology, College of Physicians and Surgeons, Columbia University, New York City.*

THE ADOLESCENT AND HIS WORLD (11 a.m.-12:15 p.m.)

Richard R. Galpin, MD, Moderator, *Dept. of Pediatrics, William Beaumont Hospital, Royal Oak;* Derek Miller, MD, *Director of Out-Patient Services, Dept. of Psychiatry, U of M Medical Center;* Ralph R. Rabinovich, MD, *Director of Research, Hawthorn Center;* Martin G. Wolfish, MD, *Chief of Adolescent Services, Hospital for Sick Children, Toronto, Ont.*

U.T.I.'s – U THINK IT'S SIMPLE? (11 a.m.-12:15 p.m.)

Arthur J. Johnson, MD, Moderator, *Fellow, American College of Surgeons, Diplomat, American Board of Urology;* Burton A. Waisbren, MD, *Milwaukee.*

ADVANCES IN DERMATOLOGIC MANAGEMENT (11 a.m.-12:15 p.m.)

Richard K. Winkelmann, MD, *Professor and Chairman, Section on Dermatology, Mayo Graduate School of Medicine, Mayo Clinic, Rochester, Minn.*

HEART ATTACK AND HEART DISEASE DEATHS: (1:45-3 p.m.) (3:45-5 p.m.)

Carl B. Beeman, MD, Moderator, *Internist, Blodgett Memorial Hospital;* Frederick H. Epstein, *Director and Professor of Epidemiology, U of M School of Public Health, Center for Research in Diseases of the Heart (Tecumseh Health Study);* Stevo Julius, MD, *Asst. Professor, Dept. of Internal Medicine, Hypertension Unit, U of M Medical Center;* Jack M. Kaufman, MD, *Cardiovascular Diseases & Internal Medicine;* Holbrooke S. Seltzer, MD, *Chief, Endocrinology Section, Vetcrans Administration Hospital, Dallas, Texas;* Manuel Tzagournis, MD, *Associate Professor of Medicine, Division of Endocrinology and Metabolism, Ohio State U. Hospital, Columbus, Ohio.*

DIVERTICULITIS–MEDICAL OR SURGICAL, and COLITIS–GRANULOMATOUS vs. ULCERATIVE: WHEN DOES IT CEASE TO BE MEDICAL AND BECOME SURGICAL (1:45-3 p.m.) (3:45-5 p.m.)

Eugene A. Gelzayd, MD, Moderator, *MSMS Chairman, Section on Gastroenterology, Diplomat, American Board of Internal Medicine, Adjunct Instructor, Dept. of Medicine, WSU School of Medicine;* William R. Eyeler, MD, *Chairman, Department of Radiology, Henry Ford Hospital, Detroit;* Robert J. Freeark, MD, *Chairman, Department of Surgery, Loyola University Medical Center, Maywood, Ill.;* Robert J. Priest, MD, *Physician-in-Charge, Division of Gastroenterology, Henry Ford Hospital.*

THE CLINICAL AND LABORATORY APPRAISAL OF THE SILICONE GEL BELOW-THE-KNEE PROSTHESIS (1:45-3 p.m.)

George H. Koepke, MD, *Professor of Physical Medicine & Rehabilitation, U of M Medical Center.*

PROSTHESIS FOR BELOW-ELBOW AMPUTEES–SOME SOCKET AND HARNESSING MODIFICATIONS (1:45-3 p.m.)

Leonard F. Bender, MD, *Professor, Physical Medicine & Rehabilitation, U of M Medical Center.*

ENZYME DETERGENT SENSITIVITY (1:45-3 p.m.)

I. Leonard Bernstein, MD, *Allergist, Jewish and General Hospital, Cincinnati, Ohio.*

PARTIAL LARYNGECTOMY AND LARYNGOPLASTY (3:45-5 p.m.)

Byron J. Bailey, M.D. *Weiss Professor and Chairman, Department of Otolaryngology, U. of Texas Medical Branch, Galveston, Texas.*

BRAIN STEM SYNDROMES OF OPHTHALMOLOGICAL IMPORTANCE (3:45-5 p.m.)

Robert S. Jampel, MD, *Professor and Chairman, Dept. of Ophthalmology, WSU School of Medicine.*

Thursday, October 7

THE SICKLE CELL SCENE (9-10:15 a.m.)

Robert M. Nalbandian, MD, Moderator, *Associate Pathologist, Dept. of Laboratories, Blodgett Memorial Hospital;* Marion I. Barnhart, PhD, *Professor of Physiology, WSU School of Medicine;* Raymond L. Henry, PhD, *Associate Professor of Physiology, WSU School of Medicine;* Makio Murayama, PhD, *Research Biochemist, Laboratory of Physical Biology, National Institute of Arthritis & Metabolic Diseases, Bethesda, Md.*

HOW DO WE ENVISION THE WORKING OF ABORTION AFTER THE LAW HAS BEEN PASSED? (9-10:15 a.m.)

R. Ralph Margulis, MD, Moderator, *Chief, Dept. of Obstetrics and Gynecology, William Beaumont Hospital, Royal Oak;* Ethelene E. Crockett, MD, *Division of Infectious Diseases, Henry Ford Hospital, Detroit;* George E. LaCroix, MD, *Associate Professor, Dept. of Gynecology & Obstetrics, WSU School of Medicine;* Johan W. Eliot, MD, *Ann Arbor.* Main Speaker is Bernard N. Nathanson, MD, *New York City.*

MYOCARDIA REVASCULARIZATION – FACT OR FANCY (11 a.m.-12:15 p.m.)

Conrad R. Lam, MD, Moderator, *Consultant, Dept. of Thoracic Surgery, Henry Ford Hospital, and Chairman, MSMS Section on Thoracic Surgery;* Donald B. Effler, MD, *and* F. Mason Sones, Jr., MD, *Department of Thoracic & Cardiovascular Surgery, Cleveland Clinic.*

WHAT ARE AUTO IMMUNE DISEASES – IS ALL THAT GLITTERS GOLD?

(11 a.m.-12:15 p.m.)

Howard Duncan, MD, MRCP, Moderator, *Division of Rheumatology, Henry Ford Hospital, Detroit;* Thomas K. Burnham, MD, *Dept. of Dermatology, Henry Ford Hospital;* Larry Sweet, MD, *Chief, Allergy Clinic, Henry Ford Hospital;* Clarence E. Rupe, MD, *Chief, Dept. of Medicine, St. John Hospital, Detroit.*

STROKES IN 1971 – HORSE AND BUGGY OR JET SET (1:45-3 p.m.)

Raymond B. Bauer, MD, Moderator, *Professor, Dept. of Neurology, WSU School of Medicine;* William Hass, MD, *Professor of Neurology, New York University Medical Center, N.Y.;* Joseph N. Schaeffer, MD, *Director, Rehabilitation Institute, Detroit.*

THE EASY (?) IDENTIFICATION OF DIFFUSE INTRAVASCULAR CLOTTING AND PROPER TREATMENT (1:45-3 p.m.)

John W. Moses, MD, Moderator, *Scientific Editor of MSMS and Director, Medical Education, Mt. Carmel Hospital;* Eberhard F. Mammen, MD, *Professor of Physiology, Pharmacology, and Pathology, WSU School of Medicine;* Robert N. Nalbandian, MD (see The Sickle Cell Scene, above).

MINIMAL BRAIN DYSFUNCTION AND ADVANTAGES AND DISADVANTAGES OF DRUG TREATMENT (1:45-3 p.m.)

Fred A. Baughman, Jr., MD, *Chairman,* Edward F. Rabe, MD, *Professor of Pediatrics, Tufts University School of Medicine, Boston, Massachusetts.*

LESIONS OF THE OVARY (1:30-5 p.m.)

Arthur T. Hertig, MD, *Professor of Pathology, Harvard Medical School and Chief, Dept. of Pathobiology, New England Regional Primate Research Center, Harvard Medical School.*

LOGISTICAL PROBLEMS OF BRINGING ANGIOGRAPHIC TECHNICS TO THE POPULATION OF AMERICA (1:45-3 p.m.)

F. Mason Sones, Jr., MD, *Dept. of Thoracic & Cardiovascular Surgery, Cleveland Clinic;*

AN AGGRESSIVE APPROACH TO THE MANAGEMENT OF VENOUS THROMBOSIS

Rodman E. Taber, MD, *Detroit;*

THE USEFULNESS OF MEDIATINOSCOPY

Ralph J. Schlosser, MD, *Grand Rapids.*

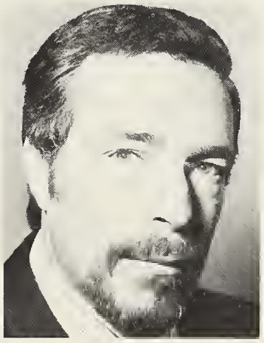
Conrad R. Lam, MD, *Consultant, Dept. of Thoracic Surgery, Henry Ford Hospital, Detroit and Chairman, MSMS Section on Thoracic Surgery.*

THE PILL AND BREASTS (3-3:45 p.m.)

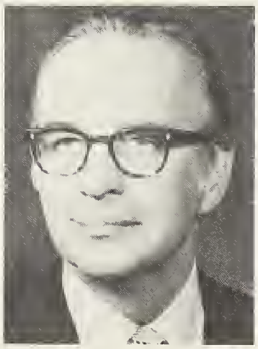
Michael J. Brennan, MD, Moderator, *President, American Cancer Foundation and Professor of Medicine, WSU School of Medicine.*

FLUID AND ELECTROLYTE PROBLEMS IN CHILDREN (3-3:45 p.m.)

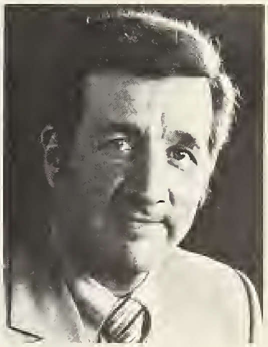
Laurence Fleischmann, MD, Moderator, *Assoc. Professor of Pediatrics, Dept. of Medicine, WSU School of Medicine and Director, Renal Services and Director, Hemodialysis and Transplantation, Children's Hospital, Detroit;* Robert C. Kelsch, MD, *Assistant Professor of Pediatrics & Communi-*



Martin G. Wolfish, MD, Chief of Adolescent Services at Hospital for Sick Children, Toronto, Ontario.



Donald B. Effler, MD, FACS, Chief of the Dept. of Thoracic & Cardiovascular Surgery, Cleveland Clinic.



Robert J. Freeark, professor and chairman, Department of Surgery, Loyola University Stritch School of Medicine, and Surgeon-in-Chief of Loyola University Hospital.

cable Diseases, U of M Medical Center; Robert W. Winters, MD.

ENZYME INDUCTION AND ITS CLINICAL IMPLICATIONS IN ANESTHETIC PRACTICE (3-3:45 p.m.)

Edward Brunner, MD, *Professor and Chairman, Dept. of Anesthesiology, Northwestern University Medical School, Chicago, Ill.*

AMBULATORY TREATMENT OF FEMORAL FRACTURES (3-3:45 p.m.)

Herbert Kaufer, MD, *Director of Orthopedics, Wayne County General Hospital.*

VERTEBRAL EOSINOPHILIC GRANULOMA

Presented by Ronald Hoekman, MD, *Grand Rapids junior author (senior author is* Curtis D. Edholm, MD, *Grand Rapids).*

TOTAL HIP REPLACEMENT—CONTRAINDICATIONS AND ALTERNATIVES (4 p.m.)

Paul R. Meyer, Jr., MD, *Chicago*

Section Meetings:

Luncheon and Dinner Speakers

PSYCHIATRY (Thursday, 8 p.m.)

THE HISTORY AND FUTURE OF HUMAN VIOLENCE AND AGGRESSION.

H. Milton Covensky, PhD, *Professor of History, Wayne State University.*

RADIOLOGY (Wednesday evening)

CORONARY ARTERY DISEASE: ROENTGENOLOGIC ASPECTS AND EVALUATION OF SURGICAL TREATMENT

Mehdi Razavi, MD, *Cardiologist, Dept. of Cardiovascular Diseases, Cleveland Clinic.*

SURGERY (Wednesday, 12 noon)

SOCIO-ECONOMIC PROBLEMS OF SURGEONS

(Speaker to be announced)

Related Groups

MICHIGAN CHAPTER, AMERICAN COLLEGE OF CHEST PHYSICIANS

CORONARY ARTERY SURGERY AND ASSISTED CIRCULATION

Adrian Kantrowitz, MD, *Chairman of Dept. of Surgery, Sinai Hospital*

DIGITALIS CONTRIBUTING TO ARRHYTHMIAS

S. K. Wilhelm, MD, *Chief of Mt. Carmel Mercy Hospital Electrocardiology*

RESPIRATORY DISEASES DUE TO AIR POLLUTANTS

George Waldbott, MD, *Emeritus Consulting Physician in Allergic Diseases, Harper Hospital*

PULMONARY EMPHYSEMA WITH DISABILITY & LEGAL IMPLICATIONS

Berney Mueller, MD, *U of M Pulmonary Disease Dept.*

OUT-PATIENT DRUG THERAPY PROGRAMS FOR TB

Paul Regan, MD, *Chief, Respiratory Disease Control, Herman Keifer Hospital*

PNEUMONIA WITH DIFFERENTIAL DIAGNOSIS

Kenneth Ho, MD, *Chief of Medicine, Herman Keifer Hospital*

Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction
THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA
Professional Protection Exclusively since 1899

DETROIT OFFICE: R. K. Wind and J. K. Gallaway, Representatives
27200 Lahser Road, Southfield 48076, Telephone: (Area Code 313) ELgin 3-4848 or 444-1439

GRAND RAPIDS OFFICE: G. J. Hawarth, Representative
422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477

Transfer a patient to a Medi-enter. This frees a hospital bed or a seriously ill patient who eeds acute care services. All ledicenters are conveniently ear hospitals. Thus transfers re quick, easy and usually at o cost to the patient.

Medicenter patients are on e road to recovery. And, at Medicenter, these patients continue to receive professional care at a sub-acute level at significantly less cost than is possible in an acute hospital.

Medicenter offers a number of benefits to both patients and physicians. The greatest advantage to physicians is that Medicenter frees beds in hospitals for more of his seriously ill patients. In addition to considerably lower costs, the patients enjoy a pleasant, restful atmosphere which is conducive to rapid recovery.

If you would like to know more about Medicenter and how it can help serve you and your hospital, we invite your inquiry.

How to give a bed to your favorite hospital.

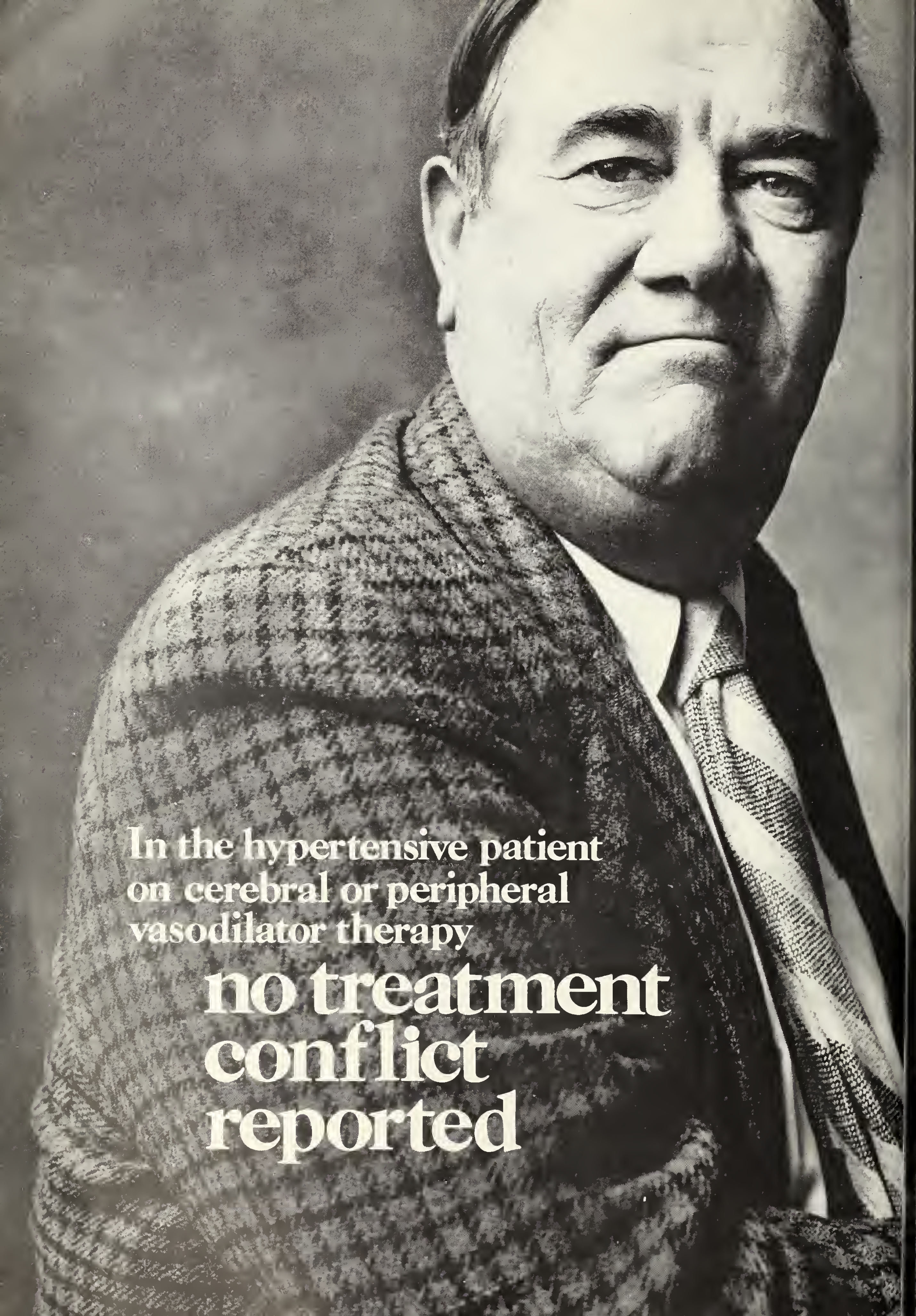
MEDICENTER
OF AMERICA

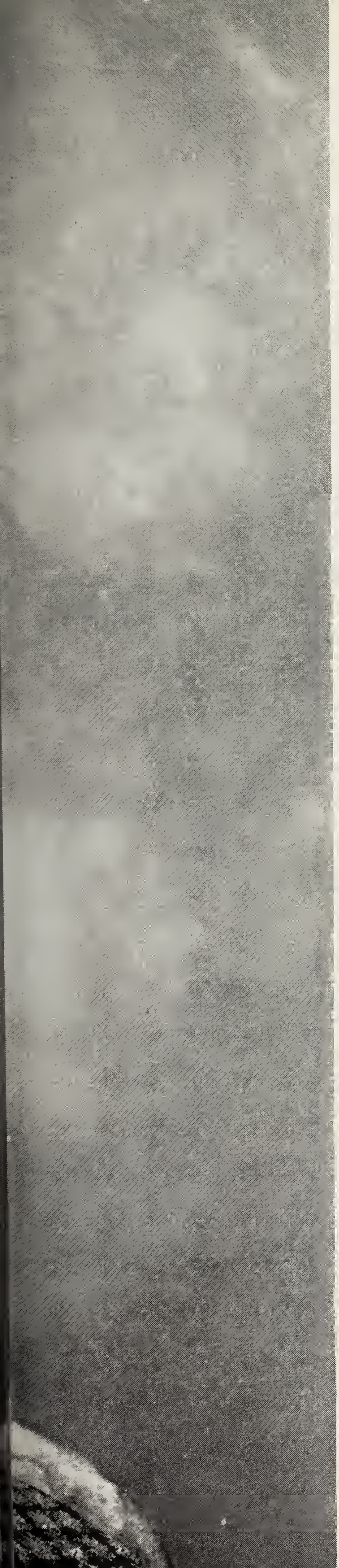
Medicenter of America
775 South Main Street
Chelsea, Michigan 48118

Doctors Park
Escanaba, Michigan 49829

420 West Fifth Street
Flint, Michigan 48503

22401 Winter Drive
Southfield, Michigan 48075


In the hypertensive patient on cerebral or peripheral vasodilator therapy
no treatment conflict reported



VASODĪLAN®

(ISOXSUPRINE HCl)

the compatible vasodilator

- has not been reported to complicate the treatment of hypertension.
- conflicts have not been reported with concurrently administered antihypertensives, diuretics, corticosteroids or miotics.
- complications in the treatment of diabetes, peptic ulcer, coronary insufficiency, glaucoma or liver disease have not been reported.

In fact, there are no known contraindications in recommended oral doses other than it should not be given in the presence of frank arterial bleeding or immediately postpartum.

Although not all clinicians agree on the value of vasodilators in vascular disease, several investigators[1-4] have reported favorably on the effects of isoxsuprine. Effects have been demonstrated both by objective measurement[2,4] and observation of clinical improvement.[1,3] **Composition:** VASODĪLAN tablets, isoxsuprine HCl, 10 mg. and 20 mg. VASODĪLAN syrup, isoxsuprine HCl, 10 mg. per 5 ml. teaspoonful. **Indications:** *In cerebral vascular disorders,* for relief of symptoms due to vascular insufficiency associated with various conditions such as arteriosclerosis and hypertension. *In peripheral vascular disorders,* for relief of symptoms such as intermittent claudication, coldness, numbness, pain and cramping of the extremities—in the management of arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). **Dosage and Administration:** In peripheral and cerebral vascular disorders—10 to 20 mg. three or four times daily. **Contraindications and Cautions:** There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding. **Adverse Reactions:** On rare occasions, oral administration of the drug has been associated in time with the occurrence of severe rash. When rash appears, the drug should be discontinued. Occasional overdosage effects such as transient palpitation or dizziness are usually controlled by reducing the dose. **Supplied:** *Tablets,* 10 mg.—bottles of 100 and 1000, and Unit Dose; 20 mg.—bottles of 100 and 500. *Syrup,* 10 mg. per 5 ml. teaspoonful—bottles of 1 pint. **References:** 1. Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960. 2. Horton, G. E., and Johnson, P. C., Jr.: Angiology *15*:70-74 (Feb.) 1964. 3. Dhrymiotis, A. D., and Whittier, J. R.: Curr. Ther. Res. *4*:124-128 (April) 1962. 4. Whittier, J. R.: Angiology *15*:82-87 (Feb.) 1964.

Mead Johnson
LABORATORIES

© 1971 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U.S.A. 186271

Classified Advertising

$5.00 per insertion of 50 words or less, with an additional 10 cents per word in excess of 50.

Are you tired of the smog, traffic congestion, sociological problems, crime and other irritations which have become part of today's urban living? Well then DISCOVER WATERTOWN, WISCONSIN. Exchange all the big city unpleasantries for the peaceful environment and easy going pace of a residential city. Watertown, a progressive community is ideally located equi-distant between Milwaukee and Madison in Southeastern Wisconsin's lake district. The community has a trade (and medical practice) area serving 40-50,000 people. Many new schools, parks, trees and recreational opportunities. A stable economy. Our new Community Health Care Center with its beautiful 110-bed general hospital, connecting (but separate) 24-unit Medical-Dental Office Building (choice of suites still available), and connecting 130-bed Nursing Home, was completed in the Spring of 1971. WE URGENTLY NEED another Internist, an Otolaryngologist, an Ophthalmologist, Obstetrician-Gynecologists, Pediatricians and Family Practitioners to join existing medical staff. An immediate successful practice assured. Excellent rapport with the University of Wisconsin Medical School at Madison, and the Medical College of Wisconsin (formerly Marquette University School of Medicine) at Milwaukee. Medical Staff leading and supporting recruitment effort. Write or call Dr. Paul Glunz, Watertown Memorial Hospital, Watertown, Wisc. 53094. Telephone (404) 261-4210.

PSYCHIATRIC RESIDENCIES—Excellent, approved psychiatric training; both demanding and clinically rich with a stimulating, well-balanced program. Affiliated with Michigan State University's College of Human Medicine. The setting is a culturally satisfying community; the serene, scenic Grand Traverse Bay area. Three year plan: $12,215 to $13,885; five year plan: $13,927 to $26,121. Contact Dr. Paul E. Kauffman, Director of Psychiatric Training, Room (165), Traverse City State Hospital, Traverse City, Michigan 49684. Phone: (616) 947-5550. An equal opportunity employer.

GP or Specialist who will do GP. How would you like to live in the Sierra Foothills of Central California? Licenses not immediately necessary for American Grads. No malpractice insurance needed. Income not bad. Reasonable work load. Contact Chief Medical Officer, Sierra Conservation Center, Jamestown, California 95327.

GENERAL PRACTITIONERS — Community of Mt. Pleasant, Michigan desirous of securing 4 general practitioners. Good hospital privileges available. 125 bed, fully accredited. Excellent consultants available in community. Mixed M.D., D.O. Staff. Active staff of 28 physicians. Community of 22,000. Site of Central Michigan University, 14,500 students. Four season area. Metropolitan areas within 50 miles. Service area of 75,000. Five G.P.'s in active practice. Community will assist actively in helping you get established. Call collect R. E. Pieratt, Adm. (517) 773-7941 or Frank Johnson, M.D., Chairman Recruitment Committee, area (517) 772-4846.

URGENTLY NEED INTERNIST and/or cardiologist to establish practice in area due to death of a local physician. Come to Dowagiac, Cass County, with 182 lakes, ideally located in Southwestern Michigan, only 2 hours from Chicago and half an hour from South Bend, Indiana. Only accredited hospital in Cass County. 60 beds, ICU-CCU units. Early expansion to 100 beds is planned. Town of 8,000. Fishing, swimming, excellent environment for children, with Junior College. Direct all responses to Robert O'Keefe, Administrator, or call collect (616) 782-7532. Lee Memorial Hospital, Dowagiac, Michigan 49047.

RADIOLOGIST Board Certified desires to practice in northern Michigan below the upper peninsula. Prefer solo practice but will consider all opportunities. Send replies to Box #6, 120 W. Saginaw Street, East Lansing, Michigan 48823.

E. N. T. SOLO PRACTICE: Very active solo E. N. T. Practice in Downriver, suburban Detroit, available immediately due to accidental death. Building, Land, complete E. N. T. and office equipment with terms. Previous owner on staff of three hospitals, each within five minutes of office. Unrivaled opportunity to start now in a busy practice which is a going concern. Call (313) AV 5-4030.

Advertisers in MICHIGAN MEDICINE are friends of the profession. By accepting their advertising we show confidence in them, their services and products. They help make the journal a quality publication. Please familiarize yourself with their services and products and let them know that you see their advertising in MICHIGAN MEDICINE.

Ec-
on-
omy!

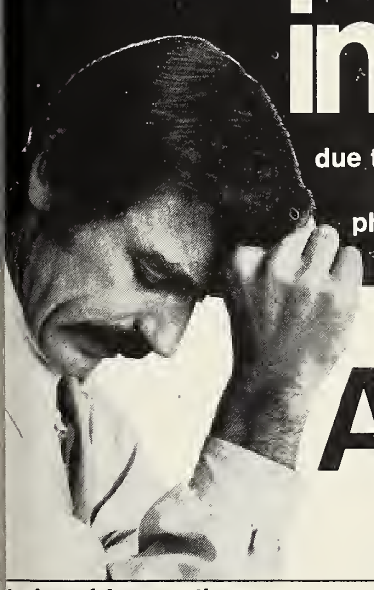
Dicarbosil®
ANTACID

Your ulcer patients and others will appreciate it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

ARCH LABORATORIES
319 South Fourth Street, St. Louis, Missouri 63102

INDEX TO ADVERTISERS

Arch Laboratories 875
Battle Creek Sanitarium 848
Brighton Hospital 849
Bristol Laboratories 853
Brown Pharmaceuticals 875
Burroughs-Wellcome & Co. 841, 863
Campbell Soup Co. 821
Classified Advertising 874
Cytology Laboratories 854
Fleet, C. B. 855
Geigy Pharmaceuticals 782
Homemakers, Inc. .... Cover III
Hospital Planning, Inc. 856
Import Motors Limited, Inc. 857
Lilly, Eli and Co. 792, 859
Mead-Johnson 826, 827, 872, 873
Medical Protective Co. 870
Medicenter of America 871
Merck, Sharp & Dohme 786, 787
Mercywood Hospital 836
Michigan State Medical Society 837
National Drug Co. 829, 830
Poythress, Wm. P. & Co. 785
Riker Laboratories, Inc. 850, 851
Robins, A. H. Co. 839, 840, 860, 861
Roche Laboratories .... 781, 838, 848, Cover II, Cover IV
Searle, G. D. & Co. 822, 823
Squibb 862
Stratton, Ben P. Agency 791
Stuart Pharmaceuticals 824, 864, 865
Upjohn 832, 833, 834, 866, 867
USV Pharmaceuticals 842, 843
Walker Corp. & Co. 790, 847
Warner-Chilcott 844, 845
Willingway, Inc. 858



The treatment of

impotence

due to androgenic deficiency in the American male. The concept of chemotherapy plus the physician's psychological support is confirmed as effective therapy.

NEW CLINICAL STUDY

The Treatment of Impotence with Methyltestosterone Thyroid (100 patients—Double Blind Study)
T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the American Fertility Society

Android®
(thyroid-androgen) tablets

Double-Blind Study and Type of Patient:
100 patients suffering from impotence. Of the patients receiving the active medication (Android) a favourable response was seen in 78%. This compares with 40% on placebo. Although psychotherapy is indicated in patients suffering from functional impotence the concomitant role of chemotherapy (Android) cannot be disputed.

hoice of 4 strengths:

ndroid	Android-HP	Android-X	Android-Plus
	HIGH POTENCY	EXTRA HIGH POTENCY	WITH HIGH POTENCY B-COMPLEX AND VITAMIN C
ch yellow tablet contains:	*Each red tablet contains:*	*Each orange tablet contains:*	*Each white tablet contains:*
thyl Testosterone ..2.5 mg.	Methyl Testosterone ..5.0 mg.	Methyl Testosterone .12.5 mg.	Methyl Testosterone ..2.5 mg.
roid Ext. (1/6 gr.) ..10 mg.	Thyroid Ext. (½ gr.) ...30 mg.	Thyroid Ext. (1 gr.) ....64 mg.	Thyroid Ext. (¼ gr.) ...15 mg.
tamic Acid ....50 mg.	Glutamic Acid ....50 mg.	Glutamic Acid ....50 mg.	Ascorbic Acid (Vit. C) .250 mg.
amine HCL ....10 mg.	Thiamine HCL ....10 mg.	Thiamine HCL ....10 mg.	Thiamine HCL ....25 mg.
			Glutamic Acid ....100 mg.
			Pyridoxine HCL ....5 mg.
			Niacinamide ....75 mg.
			Calcium Pantothenate .10 mg.
			Vitamin B-12 ....2.5 mcg.
			Riboflavin ....5 mg.
se: 1 tablet 3 times daily.	*Dose:* 1 tablet 3 times daily.	*Dose:* 1 or 2 tablets daily.	*Dose:* 2 tablets daily.
ailable: lles of 100, 500, 1000.	*Available:* Bottles of 100, 500, 1000.	*Available:* Bottles of 60, 500.	*Available:* Bottles of 60, 500.

REFER TO PDR

Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

e for literature and samples: BROWN **THE BROWN PHARMACEUTICAL CO., INC.** 2500 West 6th Street, Los Angeles, California 90057

Delegates and Alternates For 1971 MSMS House of Delegates Meeting

OFFICERS

Speaker:
Vernon V. Bass, MD, 3322 Davenport, Saginaw 48602

Vice Speaker:
James D. Fryfogle, MD, 15901 W. Nine Mile Rd., Southfield 48075

Immed. Past President:
Robert J. Mason, MD, 618 N. Woodward Ave., Birmingham 48011

Secretary:
Kenneth H. Johnson, MD, 1116 Mich. Nat'l. Tower, Lansing 48933

COMPONENT SOCIETY DELEGATES AND ALTERNATES

ALLEGAN
James I. Clark, MD, Route 1, Box 25D, Fennville 49408
Lawrence Lagatutta, MD, 560 Linn St., Allegan 49010

ALPENA-ALCONA-PRESQUE ISLE
F. C. O'Dell, Jr., MD, 615 W. Chisholm St., Alpena 49707
Edward A. Hier, MD, 125 N. Second Ave., Alpena 49707

BARRY
Robert J. Huebner, MD, 1005 W. Green St., Hastings 49058
James E. Atkinson, MD, 523 E. Charles, Hastings 49058

BAY-ARENAC-IOSCO
John T. Geneczko, MD, 1308 Columbus Ave., Bay City 48706
Paul W. Rowe, MD, Mercy Hospital, Bay City 48706
David Standiford, MD, 2108 Sixteenth St., Bay City 48706
Laszlo Kovacsi, MD, 820 N. Johnson, Bay City 48706

BERRIEN
F. Alan Kennedy, MD, 315 Fidelity Bldg., Benton Harbor 49022
Fredk. H. Lindenfeld, MD, 8 N. St. Joseph Ave., Niles 49120
John H. Carter, MD, 687 E. Empire Ave., Benton Harbor 49022
D. Kent Hassan, MD, 802 E. Front St., Buchanan 49107

BRANCH
John J. Rick, MD, 61 E. Chicago St., Coldwater 49036
Henry C. Gomley, MD, 108 E. Chicago St., Bronson 49028

CALHOUN
George T. Kelleher, MD, 235 North Ave., Battle Creek 49017
Russell C. Rowan, MD, 500 S. Ionia St., Albion 49224
S. A. Yannitelli, MD, 710 North Ave., Battle Creek 49017
Wm. D. Walters, MD, P. O. Box 1518, Battle Creek 49016

CASS
Lowell D. Smith, MD, 109 School St., Cassopolis 49031
Kenneth C. Pierce, MD, 417 W. High St., Dowagiac 49047

CHIPPEWA-MACKINAC
Donald D. Finlayson, MD, 301 E. Spruce St., Sault Ste. Marie 49783
Dale Scott, MD, 816 Ashmun St., Sault Ste. Marie 49783

CLINTON
James M. Grost, MD, Park Avenue, St. Johns 48879
Paul F. Stoller, MD, St. Johns 48879

DELTA-SCHOOLCRAFT
Donald N. Fitch, MD, Doctor's Park, Escanaba 49829
Merle E. Wehner, MD, 131 River St., Manistique 49854

DICKINSON-IRON
Paul L. Trump, MD, Commercial Bank Bldg., Iron Mountain 49801
Richard D. Cecconi, MD, Commercial Bank Bldg., Iron Mountain 49801

EATON
Eber B. Sherman, MD, 501 Carlisle St., Eaton Rapids 48827
B. Phillip Brown, MD, 541 Lansing St., Charlotte 48813

GENESEE
John W. MacKenzie, Jr., MD, 4437 Morrish Rd., Swartz Creek 48473
Charles A. Thompson, MD, 1201 San Juan, Flint 48504
Lawrence G. Bateman, MD, 1928 Lewis St., Flint 48506
Clifford W. Colwell, MD, 328 S. Saginaw St., Flint 48502
Glenn E. Moore, MD, 323 W. Second, Flint 48503
Lewis L. Simoni, MD, 3210 S. Dort Highway, Flint 48507
Richard J. McMurray, MD, 2765 Flushing Rd., Flint 48504
John C. Benson, MD, 639 Mott Foundation Bldg., Flint 48502
Vernon C. Urich, MD, 3169 W. Pierson Rd., Flint 48504
Fredk. W. Van Duyne, MD, 2849 Miller Rd., Flint 48503
Paul E. Schroeder, MD, 1673 N. Chevrolet, Flint 48504
John Quin, Jr., MD, 2765 Flushing Rd., Flint 48504
Louis B. Coriasso, MD, 9224 Happy Hollow Ct., Grand Blanc 48439
Charles R. Gumpper, MD, 4437 Morrish Rd., Swartz Creek

GOGEBIC
John R. Franck, Jr., MD, 401 Sunday Lake, Wakefield 49968
Bela Gallo, MD, Newport Clinic, Ironwood 49938

GRAND TRAVERSE-LEELANAU-BENZIE
Frank H. Power, MD, 116 Cass St., Traverse City 49684
Arthur F. Dundon, MD, 1100 Sixth St., Traverse City 49684
Richard L. Thirlby, MD, 228 S. Madison, Traverse City 49684
Richard E. Wunsch, MD, 207 Circle Dr., Traverse City 49684

GRATIOT-ISABELLA-CLARE
Jack M. Stack, MD, 510 Prospect, Alma 48801
John M. Wood, MD, 1108 Watson Rd., Mt. Pleasant 48858

HILLSDALE
Clark B. Smith, MD, 252 S. Howell, Hillsdale 49242
John R. Tarr, MD, Camden 49232

HOUGHTON-BARAGA-KEWEENAW
Paul G. Goodreau, MD, 416 Sheldon Ave., Houghton 49931
David H. Gilbert, MD, 146 Osceola St., Laurium 49913

HURON
Charles W. Oakes, Jr., MD, Harbor Beach 48441
Kenneth B. Herrington, MD, 317 Port Crescent, Bad Axe 48413

INGHAM
Robert M. Stow, MD, 2909 E. Grand River, Lansing 48912
D. Bonta Hiscoe, MD, 2909 E. Grand River, Lansing 48912
David Kahn, MD, 2909 E. Grand River, Lansing 48912
Herbert W. Harris, MD, 919 Chester Rd., Lansing 48912
Harry C. George, MD, 909 Abbott Rd., East Lansing 48823
George D. Stilwill, MD, 2909 E. Grand River, Lansing 48912
Joseph R. Cipparone, MD, St. Lawrence Hospital, Lansing 48914
Harold E. Crow, MD, 1215 E. Michigan Ave., Lansing 48912
Benjamin J. Stone, MD, 1005 Abbott Rd., East Lansing 48823
R. E. Hames, MD, 1322 E. Michigan Ave., Lansing 48912
Mark E. Heerdt, MD, 810 W. Saginaw, Lansing 48915
James F. Scallin, MD, 810 W. Saginaw, Lansing 48915

IONIA-MONTCALM
Robert E. Rice, MD, 420 S. Bower St., Greenville 48838
Richard E. Campbell, MD, 104 S. Kidd, Ionia 48846

JACKSON
Richard C. Deming, MD, 724 W. Franklin, Jackson 49201
Edward R. Weddon, MD, R. F. D. Route 2, Stockbridge 49285
Duane M. Allen, MD, Hanover Medical Center, Hanover 49241

KALAMAZOO
Donald G. May, MD, 1634 Gull Rd., Kalamazoo 49001
Adrian J. Neerken, MD, 404 Bronson Medical Center, Kalamazoo 49001
Thomas E. Andrews, MD, 1634 Gull Rd., Kalamazoo 49001
Richard J. Bower, MD, 325 E. Centre St., Portage 49081
D. A. Haddock, Jr., MD, 1711 Merrill St., Kalamazoo 49001
Paul L. VanDenBrink, MD, 208 Bronson Medical Center, Kalamazoo 49006
Robert C. Kettunen, MD, 252 E. Lovell St., Kalamazoo 49006
John L. Kihm, MD, 1219 S. Park St., Kalamazoo 49001
Thomas J. Reigel, Jr., MD, 2019 Rambling Rd., Kalamazoo 49001
Thomas R. Berglund, MD, 325 E. Centre St., Portage 49081

KENT
Fred C. Brace, MD, 1498 Lake Dr., S.E., Grand Rapids 49506
Frederick S. Gillett, MD, 50 College Ave., S.E., Grand Rapids 49503
William Haeck, MD, 245 State St., S.E., Grand Rapids 49503
Richard A. Rasmussen, MD, Blodgett Medical Bldg., Grand Rapids 49501
Harvey M. Andre, MD, 500 Cherry St., S.E., Grand Rapids 49503
Victor A. Notier, MD, 50 College Ave., S.E. Grand Rapids 49503
Jack Hoogerhyde, MD, 26 Sheldon Ave., S.E., Grand Rapids 49502
Jack G. Lukens, MD, 245 State St., S.E., Grand Rapids 49502
Kornelius Van Goor, MD, 26 Sheldon Ave., S.E., Grand Rapids 49502
Gordon L. Bartek, MD, 833 Lake Dr., S.E., Grand Rapids 49502
John C. Montgomery, MD, 1810 Wealthy St., S.E., Grand Rapids 49506
Joseph R. Lentini, MD, 303 Fulton St., E., Grand Rapids 49502
Robert S. Levine, MD, 50 College Ave., S.E., Grand Rapids 49503
William E. Kincaid, MD, 100 Michigan St., S.E., Grand Rapids 49503
Robert D. Burton, MD, 515 Lakeside Dr., S.E., Grand Rapids 49506
Robert J. Raiman, MD, 50 College Ave., S.E., Grand Rapids 49503
William G. Zimmerman, MD, 435 Cherry, S.E., Grand Rapids 49502
John C. Rienstra, MD, 833 Lake Dr., S.E., Grand Rapids 49506

LAPEER
Charles E. Conaway, MD, 1257 N. Main St., Lapeer 48446
James R. Doty, MD, 315 Clay St., Lapeer 48446
Anthony M. Abruzzo, MD, 1568 Rulane Dr., Lapeer 48446

LENAWEE
Eleanor P. Skufis, MD, 201 Orchard Rd., Adrian 49221
Marvin B. Wolf, MD, 225 Riverside Ave., Adrian 49221

LIVINGSTON
Edwin S. Woodworth, MD, 1200 Byron Rd., Howell 48843
Thomas F. Higby, MD, Fowlerville 48836

LUCE
Bernhard G. Keizer, MD, Newberry State Hospital, Newberry 49868

MACOMB
Peter V. Kane, MD, 230 North Ave., Mt. Clemens 48043
Gerald W. Morris, MD, 14 Belleview, Mt. Clemens 48043
Earl A. Rinkenberger, MD, 243 S. Gratiot Ave., Mt. Clemens 48043
Thomas J. Setter, MD, 319 N. Gratiot Ave., Mt. Clemens 48043
Herbert M. Hiller, MD, 13500 E. Twelve Mile Rd., Warren 48093
Jule J. Merritt, MD, 35992 S. Gratiot Ave., Mt. Clemens 48043
Orville W. Oughtred, MD, 26401 Harper, St. Clair Shores 48081
Julius Stone, MD, 198 S. Gratiot, Mt. Clemens 48043
William C. Wyte, MD, 263 S. Gratiot Ave., Mt. Clemens 48043

MANISTEE
David A. Wild, MD, 84 Cypress St., Manistee 49660
Vickers Hansen, MD, 310 Ninth St., Manistee 49660

MARQUETTE-ALGER
George M. Wilson, Jr., MD, 1414 W. Fair Ave., Marquette 49855
Frederick C. Sabin, MD, 1414 W. Fair Ave., Marquette 49855

MASON
William F. Sutter, MD, 220 S. James St., Ludington 49431
Robert L. Ewing, MD, 600 Tinkham Ave., Ludington 49431

MECOSTA-OSCEOLA-LAKE
James L. Tyson, MD, 1014 S. State St., Big Rapids 49307
Leland A. Hickox, MD, 1014 S. State St., Big Rapids 49307

MENOMINEE
William S. Jones, Jr., MD, 1146 10th Ave., Menominee 49858
Herman R. Brukardt, MD, 534 First St., Menominee 49858

MIDLAND
V. A. Marks, MD, 2706 Louanna, Midland 48640
Charles H. Willison, MD, 122 Townsend St., Midland 48640

MONROE
S. Newton Kelso, Jr., MD, 116 Cole Rd., Monroe 48161
Bernard Sisman, MD, 130 Cole Rd., Monroe 48161

MUSKEGON
H. Clay Tellman, MD, 315 W. Clay, Muskegon 49440
Howard V. Sanden, MD, 1643 Peck St., Muskegon 49441
Leland E. Holly, II, MD, 889 N. Second St., Muskegon 49440
Robert E. Smith, MD, Medical Arts Center, Muskegon 49440
Austin A. Aardema, MD, 1470 Peck St., Muskegon 49441
Frank L. Pettinga, MD, 1470 Peck St., Muskegon 49441

NEWAYGO
Robert E. Paxton, MD, 220 W. Pine, Fremont 49412
Jess J. DeYoung, MD, 111 W. Dayton, Fremont 49412

NORTH CENTRAL
Charles L. Oppy, MD, Roscommon 48653
Lloyd T. Wiegerink, MD, West Branch 48661

NORTHERN MICHIGAN

Jack R. Postle, MD, Arlington Heights, Petoskey 49770
Richard A. Kutcipal, MD, 211 Sunset, Petoskey 49770

OAKLAND

Zachary F. Endress, MD, 35 S. Johnson, Pontiac 48053
John H. McLaughlin, MD, 604 N. Woodward, Birmingham 48011
Shelby M. Baylis, MD, 35 S. Johnson, Pontiac 48053
Worth W. Henderson, MD, 1307 S. Washington, Royal Oak 48067
Edward E. Elder, Jr., MD, 1116 Voorheis, Pontiac 48053
Paul T. Lahti, MD, 3600 W. 13 Mile Rd., Royal Oak 48072
Arnold L. Brown, MD, 35 S. Johnson, Pontiac 48053
Bruce D. Bauer, MD, 3229 Woodward Ave., Berkley 48072
James A. Read, MD, 610 N. Woodward, Birmingham 48011
Kenneth L. Urwiller, MD, 909 Woodward Ave., Pontiac 48053
John B. Bryan, MD, 4045 W. 13 Mile Rd., Royal Oak 48072
Keith M. Holmes, MD, 880 Woodward Ave., Pontiac 48053
Richard R. Galpin, MD, 525 Southfield Rd., Birmingham 48009
Edwin J. Westfall, MD, 3535 W. 13 Mile Rd., Royal Oak 48072
John R. Lichtwardt, MD, 3535 W. 13 Mile Rd., Royal Oak 48072
Henry L. Jenkins, MD, 161 State St., Pontiac 48053
Ben Gaber, MD, 511 Pierce St., Birmingham 48009
E. William Bauer, MD, 3229 Woodward Ave., Berkley 48072
Thomas G. Varbedian, MD, 195 W. Brown St., Birmingham 48011
John A. Ingold, MD, 3535 W. 13 Mile Rd., Royal Oak 48072
William R. Rech, MD, 2335 S. Commerce Rd., Walled Lake 48088
Richard C. Reilly, MD, 909 Woodward Ave., Pontiac 48053
Abner I. Ragins, MD, 909 Woodward Ave., Pontiac 48053
J. Donald Green, MD, 6405 Telegraph Rd. #2, Birmingham 48010
Peter P. Barlow, MD, 31815 Southfield Rd., Birmingham 48009
Warren A. Wood, Jr., MD, 3535 W. 13 Mile Rd., Royal Oak 48072
Ralph J. Coskey, MD, 22100 Coolidge, Oak Park 48237
John H. Van de Leuv, MD, 91 S. Washington St., Oxford 48051

OCEANA

John J. Vrbanac, MD, 601 E. Main St., Hart 49420
Willis A. Hasty, MD, 204 N. Michigan, Shelby 49455

ONTONAGON

James P. Strong, MD, Route 1, Box 406, Ontonagon 49953
Carl R. Lahti, MD, Route 2, Ontonagon 49953

OTTAWA

Alvin Bonzelaar, MD, 144 West 26th, Holland 49423
Melvin J. Frieswyk, MD, 241 E. Main St., Zeeland 49464
Robert C. Mahaney, MD, 601 Michigan Ave., Holland 49423
Arnold R. Dood, MD, 598 Central Ave., Holland 49423

SAGINAW

Vernon V. Bass, MD, 3322 Davenport, Saginaw 48602
Roy J. Gerard, MD, 2419 Mackinaw, Saginaw 48602
Robert J. Toteff, MD, 2110 Morson, Saginaw 48602
Jack L. Barry, MD, 5670 Dixie Hwy., Saginaw 48601
William A. DeYoung, MD, Central Laboratories, Saginaw 48601
Robert E. Jardinico, MD, 3 Center Woods, Saginaw 48603
Nicholas Redfield, MD, 1811 N. Michigan Ave., Saginaw 48602
Laurence Bruggers, MD, 1703 N. Michigan Ave., Saginaw 48602

ST. CLAIR

Daniel J. Wilhelm, MD, P. O. Box 228, Port Huron 48060
Charles N. Hoyt, MD, 1501 Krafft Rd., Port Huron 48060
James W. Sharpe, MD, 1209 10th St., Port Huron 48060
David M. Hislop, MD, 5076 Lakeshore Rd., Port Huron 48060

ST. JOSEPH

Robert H. Evans, MD, 111 S. Monroe St., Sturgis 49091
Robert D. Smith, MD, Colon 49040

SANILAC

Keate T. McGunegle, MD, Sandusky 48471
Raymond J. Winfield, MD, 3014.Main St., Marlette 48453

SHIAWASSEE

Henry T. Forsyth, MD, 137 S. Saginaw St., Chesaning 48616
William J. A. Ford, Jr., MD, 113 E. Williams St., Owosso 48867

TUSCOLA

Herbert L. Nigg, MD, Caro 48723
Edward J. Miles, MD, 261 Golfview Drive, Caro 48723

VAN BUREN

David J. Millard, MD, 305 E. Oak St., Paw Paw 49079
Joseph E. Cooper, MD, M-43 West, Bangor 49013

WASHTENAW

Henry A. Scovill, MD, 1313 W. Cross St., Ypsilanti 48197
Clarence E. Crook, MD, 1657 Glennwood Rd., Ann Arbor 48104
Harold F. Falls, MD, University Hospital, Ann Arbor 48104
Harry A. Towsley, MD, W5610 University Hospital, Ann Arbor 48104
Neal A. Vanselow, MD, 2906 Parkridge Dr., Ann Arbor 48103
Howard R. Williams, MD, 1950 Manchester Rd., Ann Arbor 48104
Stuart M. Gould, Jr., MD, Mercywood Hospital, Box 65, Ann Arbor 48107
John W. Henderson, MD, University Hospital, Ann Arbor 48104
Beverly C. Payne, MD, 425 E. Washington St., Ann Arbor 48108
Lyle D. Elliott, MD, 750 Towner St., Ypsilanti 48197
Alexander Gotz, MD, 2201 Medford Rd., Ann Arbor 48104
George H. Koepke, MD, University Hospital, Ann Arbor 48104
Edwin H. Place, MD, 2616 Hawthorn Rd., Ann Arbor 48104
Richard D. Watkins, MD, 4140 Miller, Ann Arbor 48103
Robert J. Fisher, MD, 750 Towner St., Ypsilanti 48197
Robert M. Oneal, MD, 555 E. William #253, Ann Arbor 48108
Roger W. Postmus, MD, 662 Wembley Court, Ann Arbor 48103
David W. Schmidt, MD, 1230 N. Maple Rd., Ann Arbor 48103

WAYNE COUNTY

Robert K. Whiteley, MD, 608 Eastland Prof. Bldg., Detroit 48225
Homer M. Smathers, MD, 17620 W. McNichols, Detroit 48235
Ned I. Chalat, MD, 929 Fisher Bldg., Detroit 48202
James D. Fryfogle, MD, 15901 W. Nine Mile Rd., #715, Southfield 48075
James C. Danforth, Jr., MD, 20175 Mack Ave., Grosse Pte. Wds. 48236
James B. Blodgett, MD, 3535 W. 13 Mile Rd. #406, Royal Oak 48072
Sidney Adler, MD, 3011 W. Grand Blvd., Detroit 48202
Donald N. Sweeny, Jr., MD, 8445 E. Jefferson, Detroit 48214
Marjorie Peebles-Meyers, MD, 3790 Woodward Ave., Detroit 48201
Brock E. Brush, MD, 2799 W. Grand Blvd., Detroit 48202
Ralph R. Cooper, MD, 1515 David Whitney Bldg., Detroit 48226
Frank B. Bicknell, MD, 938 David Whitney Bldg., Detroit 48226
Edward J. Tallant, MD, 18041 Greenfield, Detroit 48235
Paul J. Connolly, MD, 3800 Woodward Ave., Detroit 48201
John W. Moses, MD, Mt. Carmel Mercy Hosp., Detroit 48235
Louis E. Heideman, MD, 3800 Woodward Ave., Detroit 48201

Luther R. Leader, MD, 3535 W. 13 Mile Rd., Royal Oak 48072
Charles E. Darling, MD, 673 Fisher Bldg. Detroit 48202
Alexander Blain, III, MD, 2201 E. Jefferson, Detroit 48207
A. Martin Lerner, MD, 1400 Chrysler Expressway, Detroit 48207
Robert H. Hamburg, MD, 1515 David Whitney Bldg., Detroit 48226
George Mogill, MD, 26321 Woodward Ave., Huntington Wds. 48070
Raymond J. Barrett, MD, 3800 Woodward Ave., #1202, Detroit 48201
C. Jackson France, MD, 17800 E. Eight Mile Rd. #436, Harper Woods 48225
Francis P. Rhoades, MD, 2414-16 Broderick Tower, Detroit 48226
James M. Kennary, Jr., MD, 4900 Cadieux Road, Detroit 48224
Benjamin Jeffries, MD, 19959 Vernier Road, Harper Woods 48236
Sidney E. Chapin, MD, 125 N. Military, Dearborn 48124
Kenneth L. Krabbenhoft, MD, 3825 Brush St., Detroit 48201
Conrad R. Lam, MD, Henry Ford Hospital, Detroit 48202
Robert D. Allaben, MD, 18255 W. McNichols Rd., Detroit 48219
Irvin A. Wilner, MD, 17701 W. McNichols Rd., Detroit 48235
George F. Porretta, MD, 15901 W. Nine Mile Rd., Southfield 48075
Arthur Z. Ostrowski, MD, 610 Northland Medical Bldg., Southfield 48075
James M. Pierce, Jr., MD, 3800 Woodward Ave., Detroit 48201
Gerald H. Mandell, MD, Sinai Hospital, Detroit 48235
Joseph A. Witter, MD, 134 W. University Dr., #304, Rochester 48063
Lee E. Feldkamp, MD, 360 N. Main, Plymouth 48170
Thomas M. Flake, MD, 13800 Livernois Ave., Detroit 48238
H. Ross Hume, Jr., MD, 3800 Woodward Ave., #406, Detroit 48201
Marshall J. Blondy, MD, 19201 W. Seven Mile Rd., Detroit 48219
Homer A. Howes, MD, 1515 David Whitney Bldg., Detroit 48226
Leon Rottenberg, MD, 13419 Fenkell Ave., Detroit 48227
William J. Yott, MD, 854 Lakeshore Rd., Detroit 48236
Eli J. Igna, MD, 584 Lakeland, Grosse Pte. 48230
Hershel Sandberg, MD, 17550 W. Twelve Mile Rd., Southfield 48075
Henry M. Domzalski, MD, 15252 Gratiot Ave., Detroit 48205
Arthur B. Levant, MD, 15715 E. Warren, Detroit 48224
Joseph L. Ponka, MD, 2799 W. Grand Blvd., Detroit 48202
Reuben I. Shapiro, MD, 22341 W. Eight Mile Rd., Detroit 48219
Fred E. Caumartin, MD, 17184 Wildemere, Detroit 48221
Eugene L. Freitas, MD, St. Johns Hospital, Detroit 48236
Louis R. Zako, MD, 7720 Allen Road, Allen Park 48101
Frank B. Walker, II, MD, 1206 Balfour Road, Grosse Pte. Pk. 48230
Richard S. Kamil, MD, 14438 W. McNichols Rd., Detroit 48235
Herbert A. Raskin, MD, 20100 W. Ten & ½ Mile Rd., Southfield 48075
Ralph H. Pino, MD, 31841 Kingswood Square, Farmington 48024
Richard L. Lamont, MD, 3815 Pelham Road, Dearborn 48124
Arthur A. Ulmer, MD, 79 Greenbriar, Grosse Pte. Shores 48236
Fredrick Weissman, MD, 20905 Greenfield Road, Southfield 48075
Walter F. Kujawski, MD, 17800 E. Eight Mile Rd., Detroit 48236
Paul R. Dumke, MD, 2799 W. Grand Blvd., Detroit 48202
Alexander H. Hirschfeld, MD, 625 Purdy, Birmingham 48009
Albert J. Albrecht, MD, 15901 W. Nine Mile Rd., Southfield 48075
Joseph O. Reed, Jr., MD, 448 Lincoln, Detroit 48230
John W. Moynihan, MD, 2841 Monroe Blvd., Dearborn 48124
Richard D. Anslow, MD, 1515 David Whitney Bldg., Detroit 48226
John Gilroy, MD, Harper Hospital, Detroit 48201
Walter L. Anderson, MD, 1553 Woodward Ave., Detroit 48226
Vincent J. Gallant, MD, 1414 Wellesley Dr., Detroit 48203
Charles J. Holt, Jr., MD, 1210 South Oxford, Grosse Pte. 48236
Michael N. Zelenock, MD, 15830 Fort, Southgate 48192
Elden C. Baumgarten, MD, 1062 Lochmoor Blvd., Grosse Pte. Wds. 48236
Kenneth J. Ray, MD, 28059 Elba Drive, Grosse Ile 48138
John F. Cotant, MD, 15901 W. Nine Mile Rd., #420, Southfield 48075
Robert C. Thumann, Jr., MD, 20045 Mack Ave., Grosse Pte. Wds. 48236
Earl E. Weston, MD, 18101 James Couzens Hwy., Detroit 48235
Paul M. Zavell, MD, 92 Moran Road, Grosse Pte. Farms 48236
Raymond J. Kokowicz, MD, 19440 Van Dyke, Detroit 48234
Donald W. Visscher, MD, 12922 W. Warren, Dearborn 48126
Donald I. Bryan, MD, 15901 W. Nine Mile Rd., Southfield 48075
Alfred Golden, MD, 26764 York Road, Huntington Wds. 48070
Thomas Ganos, MD, 6742 Park Ave., Allen Park 48101
Lee B. Stevenson, MD, 22812 Walsingham Road, Farmington 48024
Joseph J. Woods, MD, 18255 W. McNichols Rd., Detroit 48219
Myron H. Joyrich, MD, Sinai Hospital, Detroit 48235
Everal M. Wakeman, MD, 155 South Denwood, Dearborn 48124
Andrew R. W. Climie, MD, Harper Hospital, Detroit 48201
Robert E. McKnight, MD, 15901 W. Nine Mile Rd., Southfield 48075
Arthur Goldberg, MD, 20461 John R. St., Detroit 48203
Waldo L. Cain, MD, 3800 Woodward Ave., #804, Detroit 48201
Gilbert M. Bazil, MD, 14200 Puritan, Detroit 48227
James R. Lloyd, MD, 1515 David Whitney Bldg., Detroit 48226
Frederick W. Hyde, Jr., MD, Grace Hospital, Detroit 48201
William A. Willoughby, MD, 974 Fisher Bldg., Detroit 48202
Louis F. Hayes, MD, 441 E. Jefferson, Detroit 48226
James E. Kermath, MD, 15101 Southfield, Allen Park 48101
Clayton M. Shors, MD, 20861 Mack, Grosse Pte. Wds. 48236
E. Clarkson Long, MD, 19751 James Couzens Hwy., Detroit 48235
William G. Bentley, MD, 50 Westminster, Detroit 48202
William G. McDonald, MD, 15600 Michigan Ave., Dearborn 48126
Andrew J. Hopkins, MD, 4407 Roemer, Dearborn 48126
James P. Gallagher, MD, 14801 Southfield, Allen Park 48101
Raymond D. Sphire, MD, 1420 St. Antoine, Detroit 48226
Lawrence J. McNichol, MD, 18424 W. McNichols Rd., Detroit 48219
Robert A. Gerisch, MD, 1217 David Whitney Bldg., Detroit 48226
John J. Siller, MD, 17000 W. Eight Mile Rd., Southfield 48075
Lincoln E. Solberg, MD, 2021 Monroe, Dearborn 48124
Ralph C. Rueger, MD, 3399 Daleview Dr., Ann Arbor 48103
John M. Shuey, MD, 17198 Oak Dr., Detroit 48221
Jean M. Holdredge, MD, 3011 W. Grand Blvd., Detroit 48202
I. Walter Silver, MD, 20000 W. Chicago, Detroit 48228
Samuel I. Lerman, MD, 18330 Parkside, Detroit 48221
Frank L. Harrington, MD, 15901 W. Nine Mile Rd., Southfield 48075
Eugene J. Cetnar, MD, 4322 Bishop, Detroit 48224
Robert C. Douglass, MD, 23023 Orchard Lake Rd., Farmington 48024

WEXFORD-MISSAUKEE

Dennis E. Van Alst, MD, 520 Cobb St., Cadillac 49601
Lawrence O. Garber, MD, 520 Cobb St., Cadillac 49601

MSMS SECTION DELEGATES AND ALTERNATES — 1971

SECTION ON ALLERGY AND APPLIED IMMUNOLOGY
James A. McLean, MD, 1313 E. Ann St., Ann Arbor 48103
John M. Lesesne, MD, 17770 Mack Ave., Grosse Pointe 48224

SECTION ON ANESTHESIOLOGY - MICHIGAN SOCIETY OF ANESTHESIOLOGISTS, INC.
Bernard J. Sivak, MD, 24665 Santa Barbara, Southfield 48075
John D. Snider, MD, 1827 Argentina Drive, SE, Grand Rapids 49506

SECTION ON DERMATOLOGY
Robert J. Schoenfeld, MD, 800 S. Adams Road, Birmingham 48011
Richard J. Ferrara, MD, 20045 Mack Ave., Grosse Pte. Woods 48236

SECTION ON GASTROENTEROLOGY
Abner I. Ragins, MD, 909 Woodward Ave., Pontiac 48053
William H. Morse, MD, 26711 Southfield, Lathrup Village 48075

SECTION ON GENERAL PRACTICE
James F. Dooley, MD, 3210 S. Dort Hwy., Flint 48507
Joseph V. Fisher, MD, 116 Park St., Chelsea 48118

SECTION ON INTERNAL MEDICINE
William B. McIntyre, MD, 20901 Moross Rd., Detroit 48236
Klaus P. Schmidt, MD, 871 Fisher Bldg., Detroit 48202

SECTION ON NEUROLOGY
Mark C. Levine, MD, G-3083 Flushing Road, Flint 48504
James D. Darnley, MD, 26711 Woodward Ave., Huntington Woods 48070

MICHIGAN ASSOCIATION OF NEUROLOGICAL SURGEONS (SECTION ON NEUROLOGICAL SURGERY)
H. Harvey Gass, MD, 529 Fisher Bldg., Detroit 48202
Philip H. Hoekstra, MD, 909 Fulton St., E. Grand Rapids 49503

SECTION ON OBSTETRICS-GYNECOLOGY
Harrison C. Visscher, MD, 515 Lakeside Dr., SE. Grand Rapids 49506
Norman L. Banghart, MD, 1950 Manchester Rd., Ann Arbor 48104

SECTION ON OCCUPATIONAL MEDICINE (MICHIGAN INDUSTRIAL MEDICAL ASSOCIATION)
Benjamin B. Holder, MD, P. O. Box 1693, Midland 48640
Not Elected

SECTION ON OPHTHALMOLOGY
Maurice B. Wehr, MD, 2355 Fort St., Lincoln Park 48146
Glenn E. Mohney, MD, 1131 Erie St., Port Huron 48060

SECTION ON ORTHOPEDIC SURGERY
Hira E. Branch, MD, 817 Mott Foundation Bldg., Flint 48502
Not Elected

SECTION ON OTOLARYNCOLOGY
John W. Grigg, MD, 515 Mulholland, Bay City 48706
Miles Taylor, MD, 550 Eastland Prof. Bldg., Detroit 48236

SECTION ON PATHOLOGY (MICHIGAN SOCIETY OF PATHOLOGISTS)
Leo W. Walker, MD, 4225 Apple Tree Lane, Lansing 48917
Edwin M. Knights, Jr., MD, 16001 W. Nine Mile Rd., Southfield 48075

SECTION ON PEDIATRICS
Robert A. Zink, MD, 25815 Harper Ave., St. Clair Shores 48081
Donald H. Ter Keurst, MD, 2740 Eastern Ave., S.E., Grand Rapids 49507

SECTION ON PHYSICAL MEDICINE
Jack R. Grommons, MD, 721 W. Sixth Ave., Flint 48503
Joseph N. Schaeffer, MD, 261 Mack Blvd., Detroit 48201

SECTION ON PLASTIC SURGERY
David B. Hawtof, MD, 15901 W. Nine Mile Rd., Southfield 48075
William G. Yost, Jr., MD, 50 College Ave., SE, Grand Rapids 49503

SECTION ON PROCTOLOGY
W. Patrick Mazier, MD, 72 Sheldon Ave., SE, Grand Rapids 49502
William L. Beauregard, MD, 1665 W. Twelve Mile Rd., Berkley 48072

SECTION ON PSYCHIATRY
Stephen C. Mason, III, MD, 820 E. University Dr., Ann Arbor 48104
Warren S. Wille, MD, 5325 Brown Lake Road, Jackson 49203

SECTION ON PUBLIC HEALTH & PREVENTIVE MEDICINE
Winston B. Prothro, MD, 1619 Walker St., NW, Grand Rapids 49504
Leland C. Brown, MD, 21536 Parkway, St. Clair Shores 48082

SECTION ON RADIOLOGY
Leland E. Holly, II, MD, 889 N. Second St., Muskegon 49440
Robert A. Songe, MD, Oakwood Hospital, Dearborn 48121

SECTION ON SURGERY
Michael N. Zelenock, MD, 15830 Fort St., Southgate 48192
Peter A. Duhamel, MD, 134 W. University Dr., #103, Rochester 48063

SECTION ON THORACIC SURGERY (THE MICHIGAN SOCIETY OF THORACIC SURGEONS)
Forest D. Dodrill, MD, Woodberry Dr., Bloomfield Hills 48013
Conrad R. Lam, MD, Henry Ford Hospital, Detroit 48202

SECTION ON UROLOGY (DETROIT BRANCH AMERICAN UROLOGICAL SOCIETY)
David Siegel, MD, 2909 E. Grand River, Lansing 48912
Vernon Urich, MD, 3169 W. Pierson Rd., Flint 49504

STUDENT AMERICAN MEDICAL ASSOCIATION DELEGATES & ALTERNATES

MICHIGAN STATE UNIVERSITY
Michael R. Shier, 1051 Lilac Ave., East Lansing 48823
Frederick M. Vincent, Giltner Hall, Room 100, MSU, East Lansing 48823

WAYNE STATE UNIVERSITY

UNIVERSITY OF MICHIGAN
Stephen Lowry, 907 Sybil Ave., Ann Arbor 48104
Per L. Okey, 2417 N. Circle Drive, Ann Arbor 48104

Michigan Medicine

Breaking News: Deadline, Aug. 26
September 1971, Volume 70, Number 22
Michigan State Medical Society

Outstanding program awaits MSMS members at Grand Rapids

A program of depth and variety will be featured during the Michigan State Medical Society's Annual Scientific Session October 3-7 in Grand Rapids.

Harold Hiscock, MD, MSMS President, foresees the program as one which will serve the needs of the practicing physician by providing fine educational experiences in a relatively short period of time. The program will convey the most up-to-date research developments in scientific medicine to the physician of 1971. Coming to speak will be local, national and international medical authorities from Cleveland, Detroit, New York, Phoenix, Dallas, Chicago, Toronto, and other cities. *(See Page 868)*

Senator Griffin coming to MDPAC luncheon

U.S. Senator Robert P. Griffin will address the annual MDPAC Congressional Luncheon October 4.

Louis R. Zako, MD, chairman of MDPAC, reports Senator Griffin will peruse the national health scene for Michigan's doctors and auxiliary members.

Doctor Zako said obtaining Senator Griffin for the Congressional Luncheon continues an established tradition of MDPAC to bring before Michigan physicians outstanding national political leaders of both parties.

Tickets for the luncheon may be reserved in advance by sending $5 per ticket to MDPAC, Box 769, East Lansing, Mi 48823. Tickets will be allotted on a first-come basis.

Few have attained the stature of Senator Griffin in the national lawmaking process. He is the only Michigan senator ever to have been named by either party as party "whip"—the No. 2 position among his party's Senators.

MSMS committees report progress on Fee Survey, HMOs, Medical Service

The MSMS Council, in session July 30-31, heard progress reports on various activities, and reviewed minutes from 19 MSMS Committee meetings.

The Council heard officials of Michigan Medical Service review operations during the past year and discuss current and future concerns.

The Council also received a progress report about the new Michigan Council of Specialty Societies from Glenn E. Moore, MD, Flint, recently elected the leader.

Representatives of Alexander Grant firm and MSMS Treasurer John R. Ylvisaker, MD, discussed the Phase II

CAPSULES

Ed Radke, chief, Vision Section, Bureau of Maternal and Child Health, MDPH, reports an encouraging response to the "Doctor's Vision Report for Preschool Child," green cards drafted and approved by the MSMS Committee on Eye Care and mailed to physicians with instructions that they be returned to the physicians' local health departments. Mr. Radke emphasized the importance of screening programs for preschool children with possible vision problems, noting that often 1 out of 6 children in this age group needs eye care before he can reasonably be expected to perform tasks at school. Both parents and physicians are urged to be aware of signs of early eye trouble among preschoolers in Michigan.

* * *

The Michigan Hospital Association has requested that MSMS cosponsor a Nov. 4-5 workshop on Joint Commission Accreditation Standards, being held for trustees, physicians, administrators, department heads and others interested in reviewing the theory underlying the accreditation program. The conference will also consider the specifics of satisfying requirements under JCAH's new standards which became effective July 1. A registration fee will cover the expenses of the workshop, to be held in Detroit.

* * *

Personnel of the rehabilitation department of the Munson Medical Center in Traverse City recently placed a bronze plaque and portrait of Edward F. Sladek, MD, in the rehabilitation lobby there in memory of Doctor Sladek's 51 years of outstanding service. Doctor Sladek's death on October 2, 1970, ended a highly distinguished medical career which brought him numerous awards. He was a diplomat of the American Board of Proctology, a fellow of the American Proctology Society, past president of the Michigan State Medical Society, and a fellow of the International College of Surgeons.

study being conducted by the firm to ask MSMS members their opinions as to how their medical society can serve them best.

The Council authorized the Committee on Governmental Medical Care Programs to seek a federal grant to finance an informational study about HMOs; and also approved a MSMS statement of principles re governmental medical care programs.

The Committee on Medical Socio-Economics reported progress on the surveys of cost of medical practice and on fees. The Committee on Hospital Relations minutes told about a joint meeting with representatives of the Michigan Association for Graduate and Postgraduate Medical Education. The Committee on Public Relations relayed an offer from the Michigan Chamber of Commerce to mail *Challenge* magazine free to interested doctors; and the recommendation was approved.

The Committee on RVS told about conferences held with various specialties. Matters dealing with disposables, water pollution, uniform physical status cards, and gonorrhea control were included in the minutes of the Public Health Committee. The work of tumor registries was described in the Cancer Committee minutes. The Committee on Maternal and Perinatal Health minutes gave progress reports on desk reference cards, obstetrical-bed-need report, perinatal mortality studies. The Committee on Medical Aspects of Organized Athletics is working on possible changes in the handling of physical examinations for high school athletes.

The Council approved a recommendation of the Committee on Cardiac Disease that the PR Committee mount certain no-smoking activities. The Committee on Alcohol and Drug Dependence is continuing its study of the alcoholic and drug abusing physician and possible treatment programs.

The executive secretaries of several component medical societies were invited observers at the Council meeting.

MSMS considers foundation for peer review services

The MSMS Council on September 15 will review a progress report of the MSMS Committee on Utilization Review and Health Insurance Problems which has been studying the medical foundation concept.

The Committee suggests that MSMS should attempt to establish a foundation — as a separate corporation — which could contract peer review services. The Committee has met with representatives of the Michigan Association of Osteopathic Physicians and Surgeons to discuss possible areas of cooperation, scope of operation, etc.

Two state medical societies, New Mexico and Florida, have been involved in setting up independent foundations, which reportedly are working on peer review, and numerous foundations were established in California with county medical society cooperation.

CAPSULES/Continued

The Kent County Medical Society was presented a plaque at its June 15 meeting by Sylvester Jones, Administrator, Neighborhood Health Services of Kent County, Inc. The award recognizes the volunteer services rendered to the community at the Franklin-Hall Health Center by members of the Society, April 1968-1971.

* * *

"The Law of Malpractice in Michigan," by Fredrick Weissman, MD, Paul A. Gruber, LLB, and Lawrence S. Charfoos, LLB, which appeared in the May issue of *Michigan Medicine*, has been introduced as required reading to the medical staff of Pontiac State Hospital and is presently made available to each staff member in his Physicians' Handbook.

* * *

The July 29 deadline set by the Federal Bureau of Narcotics and Dangerous Drugs for use of physician registration numbers under the Controlled Substances Act has been extended to October 1. Personnel shortages have made the processing of all applications impossible. The Bureau had previously extended a May 1 deadline to July 29. See article "RX Legislation Deadline Extended," page 3, May 10 issue of *American Medical News* for details.

* * *

The planning and establishment of federal priorities for drug education and treatment by a centralized agency was advocated recently by Maurice Seevers, MD, MSMS member and chairman of the U-M department of pharmacology. Doctor Seevers testified for the AMA before the House Subcommittee on Public Health and Environment.

* * *

The State Board of Education recently referred to its subcommittee on interscholastic athletics the MSMS resolution which urges the appointment by schools of certified athletic trainers. The Representative Council of the Michigan High School Athletic Association has concurred with the 1970 resolution.

Kellogg funds launch MHC's "Project 75"

A $102,500 grant from the W. K. Kellogg Foundation to the Michigan Health Council has made possible the launching of "Project 75" aimed at increasing by the end of 1975 the number of Michigan health personnel by 75,000, in an effort to eliminate shortages. The U.S. Bureau of Health Manpower recently predicted 283,000 openings annually during the 1970's for health personnel and observed that the number of health personnel will probably have to be doubled by 1980.

MHC Executive Vice President John A. Doherty remarked that the Council's prime efforts will be focused on attracting minority students from urban ghetto high schools as well as outstate rural high schools.

The Michigan Health Council currently has nearly 100 black and chicano students involved in the Summer Exploratory Experience Program in Health Occupations in Detroit.

The Council plans several statewide and regional health career day programs in an effort to stimulate more interest among Michigan students in pursuing a health career.

CAPSULES/Continued

Newly elected officers of the Michigan Industrial Medical Association include president, Elias A. Shaptini, MD, Detroit, president-elect, Lambertus Mulder, MD, Muskegon, and vice-president, William A. Rye, MD, Kalamazoo. Chosen as secretary-treasurer was Louis W. Staudt, MD, Birmingham.

* * *

Vern M. Pings, medical librarian at the Wayne State University medical library since 1961, has recently been selected as acting director of University Libraries. In addition to his library post at WSU, Mr. Pings holds a professorship in the School of Medicine, and is a frequent contributor to professional library publications.

Receiving a warm welcome from Donald N. Sweeny, Jr., MD, right, in the MSMS headquarters' hospitality suite during the American Medical Association's Convention, June 20-24, Atlantic City, is George R. Herrmann, MD, 76, professor of medicine at the U. of Texas Medical Branch in Galveston. Doctor Herrmann, who formerly practiced in Oakland County, was awarded the AMA's highest honor, the Distinguished Service Award, at the Convention. Doctor Sweeny is the Chairman of the Michigan Delegation to the AMA.

Luther R. Leader, MD, left, Royal Oak, received an illuminated scroll at the 12th annual Michigan Association of the Professions Congress in recognition of his five terms as a board member. J. Russell Brink, MD, right, Grand Rapids, MAP secretary, reviewed work of the Association during the meeting at Mackinac Island. Shown visiting with the two MSMS members are Judge Joseph S. Linden, second from left, of Corunna, and Edwin H. Young, PE, second from right, of Ann Arbor, a past president of MAP.

RVS Committee completes specialty meetings, prepares summary

The MSMS RVS Committee, having completed its series of meetings with specialty representatives, is currently preparing its report and recommendations for the MSMS Council and House of Delegates.

Detroit Physician heads surgical team, implants partial artificial heart

On August 11, 63-year-old Haskell Shanks became the third patient in medical history to receive a permanent partial artificial heart. Mr. Shanks, a plant security guard from Warren, was "progressing as expected" at Sinai Hospital seven hours after the implantation of a six-inch rubber-and-dacron pump which surgeons hope will aid his failing heart. For the past year Shanks has suffered from congestive heart failure and attendant progressive weakening of the heart muscles. His condition had worsened considerably in the last few months, during which time stays at Hutzel and Mt. Carmel Hospitals were necessary. The decision to implant a patch booster was made by Adrian Kantrowitz, MD, among the foremost heart surgeons and the one who performed the first American heart transplant in 1967.

An eight-man surgical team, headed by Doctor Kantrowitz, performed the ten-hour operation after all other methods of medical treatment failed to help Shanks' difficulty. The patch booster was developed by Doctor Kantrowitz. His work on the device was supported by a grant from the federal government's National Heart and Lung Institute.

Renowned artists to judge Art Show entries during Annual Session

Mrs. William E. Sprague, District IV Art Coordinator for the Doctors and Wives Art Show of the Woman's Auxiliary to the Michigan State Medical Society, scheduled during the MSMS Annual Session, Oct. 3-7, Grand Rapids, reports that the exhibition will be judged by two prominent artists, both bringing extensive art background and training to the show.

Armand Merizon, who has experimented widely in painting techniques, has also exhibited and won prizes at various competitions in the media of drawing and painting. Awarded a European Art Travel Fellowship in 1960, Mr. Merizon toured museums for three months; presently he is represented in numerous private collections housed as far apart as Paris and San Francisco.

Also judging will be Fred Arthur Myers, director, Grand Rapids Art Museum, previously Assistant Curator of Paintings and Assistant to the Director, Carnegie Institute. Mr. Myers' vast experience includes administrative and curatorial positions, as well as work in the planning and designing of exhibitions. Mr. Myers was awarded a B.A., cum laude, from Harvard in 1959 and receive his M.A. in Art History from Harvard in 1962.

CAPSULES/Continued

At the midsummer session of the MSMS Council, MAP Board of Directors incumbents J. Russell Brink, MD, and George W. Slagle, MD, were reappointed to their positions with the Michigan Association of the Professions.

* * *

A recent survey shows that the interest of Ingham County Medical Society physicians toward the idea of group practice is apparently rising.

Survey results indicate further that the traditional fee for service is favored over any sort of prepayment plan in a group practice situation.

Specifically, physicians were questioned with regard to changes in delivery of health care being promoted by government agencies; almost all of the 121 members who responded to the survey were favorably inclined toward the notion of group practice.

A total of 284 questionnaires were mailed by the society's medical economics committee, headed by Robert M. Stow, MD.

At the present time the Lansing area has no formally organized group practice situations, although several groups of physicians have joined into professional corporations for the purpose of practicing specialty medicine.

* * *

The Michigan State Medical Society has provided 3,000 copies of the AMA's drug abuse folders to Station WFMK-FM, Lansing, for distribution under the AMA community drug education project.

* * *

Howard H. Mehaffey, DDS, acting chief of the Dental Division of the Michigan Department of Public Health since the retirement last September of C. V. Tossy, DDS, has been appointed chief of the Division. The appointment was effective July 1. Doctor Mehaffey has been with the Division since 1958.

IEDIGRAMS
TE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

MEDICAL CENTER LIBRARY
DEC 21 1971

Michigan Medicine
September 21, 1971, Volume 70, Number 23
Michigan State Medical Society
Reading Time: 2 Mins. 30 Seconds

RANGEMENTS ARE SET for the MSMS House of Delegates session in Grand
apids, Oct. 3-4-5, and the Scientific Session, Oct. 6-7. The House ll act on many resolutions and reports, and Sidney Adler, MD, Detroit, ll be installed to succeed Harold H. Hiscock, MD, Flint, as the new MS president. Programs for the Annual Scientific Session (see boxed em below) have been mailed to every MSMS member. There is no regis- ation fee and advance registration is not necessary.

THE MSMS COUNCIL September 15 heard presentations from Johnson and Higgins, an insurance brokerage firm, and the AMA outline proposed malpractice insurance programs for Michigan. The Council requested a special committee to review details of both plans and report to Council Oct. 3 with their recommendations.

UR MEDICAL EXAMINER SYSTEM SEMINARS are scheduled for MSMS members the Ad Hoc Committee on Implementation of the Medical Examiner stem. Doctors willing to participate, and those interested in formation are invited. Advance registration is not necessary; the e is $5.00. Seminars will be:

Thursday, Oct. 14, 6:00 p.m., Chief Shoppenagon Inn, Grayling
Wednesday, Oct. 20, 6:00 p.m., Holiday Inn, Marquette
Wednesday, Nov.3, 6:00 p.m., Hospitality Inn, Grand Rapids
Thursday, Nov. 4, 6:00 p.m., Ramada Inn, Saginaw

STATE LEGISLATURE has recessed until Oct. 26 leaving disposition of the Social Services Dept. budget (including Medicaid) unresolved. Senate and House conferees were $31,200,000 apart. Line item for Medicaid Physician Reimbursements is $51,533,600 in the House version; $50,045,000 in Senate bill.

Health issues adopted in other budget bills sent to the Governor for signature: Public Health Dept. $23.0 million or up $1.2 million. Included is $320,000 for new health care administration for surveillance of Medicaid services to be matched by $900,000 federal funds; and $2 million for maternal and infant care including experimental prenatal and postnatal clinic services in Detroit. Dept. of Mental Health budget is $210,900,000 or up $12.7 million. Included is $3 million for drug abuse program, $19 million for community mental health services, $82.1 million for institutional mentally ill, and $73 million for institutional mentally retarded.

GPs will be especially interested in the MSMS Annual Session program, Wednesday afternoon, Oct. 6, on "Heart Attack and Heart Disease Deaths." Speakers will consider various facets of contemporary life that affect heart health and ways of detecting potential health victims. Hypertension, obesity, and the sedentary life will be discussed. The results of U-M health study at Tecumseh "Screening for Coronary Prone," will be presented, etc., etc. See Program for all details.

ALL PAYMENTS from Blue Shield to physicians have been frozen as of Aug. 15 at existing levels. Prevailing screens for fees will not be allowed to increase. Blue Shield announced the estimated savings of $4 million will be passed on to subscribers.

ENTRIES ARE STILL OPEN for Doctors-Wives Art Show being sponsored at 1971 Annual Session by the State Woman's Auxiliary. Wanted are paintings, sculpture, ceramics, drawings and graphic arts, jewelry, weaving, photography, etc. Phone Mrs. W. E. Sprague at 616/453-9483.

INTERESTED DOCTORS ARE invited to a MSMS-MHA "Workshop on Joint Commission Accreditation Standards" at the Ramada-Metro Inn near Detroit Metropolitan Airport Friday, Saturday, Nov. 5-6. Adequate physician participation is essential. Write for information: Michigan Hospital Association, 2213 E. Grand River, Lansing 48912.

MSMS COUNCIL has "reconfirmed the MSMS recognition of the importance of pollution control within and without the organizational structure of government, and urges all individuals and groups to cooperate with and assist and encourage in any way possible efforts of pollution control."

THE WISCONSIN GOVERNOR recently signed a bill into law authorizing workmen's compensation payments for chiropractic treatment.

DOCTORS ARE ASKED to report cases of contact dermatitis (which may be sev caused by natural tanning agents used on leather sandals from India. Wri Richard Bail, MD, MDPH, 3500 N. Logan, Lansing. (See JAMA 211: 1378, Feb 23, 1970)

OCTOBER 1 IS THE DEADLINE for physicians to apply to the Federal Bureau of Narcotics and Dangerous Drugs for registration numbers under the Controlled Substances Act. (See AMA NEWS, May 10)

A COMMISSION TO STUDY PROBLEMS related to malpractice claims has been established by HEW Secretary Richardson at the direction of President Nix The Commission will examine the causes of claims and how they affect the health care and legal systems, insurance industry, and the public.

GOING TO THE MSMS ANNUAL SCIENTIFIC SESSION? Telephone numbers where you can be reached are 616/454-9411 and 616/454-9412 . . . the Communications Center will be on the Main Floor, Civic Auditorium, Grand Rapids.

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.

© 1971 Michigan State Medical Society.

Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

Second Class Postage Paid at East Lansing, Mich.
and at additional mailing offices.

EDIGRAMS
TE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO MEDICAL CENTER LIBRARY
OCT 15 1971

Michigan Medicine

September 30, 1971, Volume 70, Number 24
Michigan State Medical Society
Reading Time: 2 Mins. 20 Seconds

ADVANCE REGISTRATION is necessary for the 1971 MSMS Annual Scientific
ssion in Grand Rapids, Wednesday and Thursday, October 6-7. Program
terials have appeared in Michigan Medicine and have been sent to every
MS member. Rooms are available at the Pantlind Hotel. Sessions will
held in the Hotel and the Grand Rapids Civic Auditorium, with all the
al functions in the Pantlind and the registration, scientific meetings,
hibits, communications center, and news room in the Civic Auditorium.
ctors may be reached in Grand Rapids through the MSMS Communications
nter: phone 616/454-9411 and 616/454-9412.

A CONFERENCE ON MEDICAL MALPRACTICE was discussed by MSMS staff and members of the Michigan Department of Commerce Insurance Bureau, who plan to move ahead at the request of MSMS. Identified as a problem is the question of how to interest new insurance firms to offer professional liability coverage or how to revise the present requirements that force the saturated writers to maintain certain reserves.

HE CONSUMER FRAUD NEWSLETTER," September issue, from Attorney General
ank J. Kelley offers this advice, "There are no quick cures for arthritis,
gh blood pressure, cancer, diabetes, rheumatism, ulcers, etc. If beset
such, seek a doctor."

AMA WILL PRESENT testimony on national health insurance in public hearings scheduled to begin in mid-October before the U.S. House of Representatives Committee on Ways and Means. Michigan members of the Committee, Rep. Charles Chamberlain, Lansing Republican, and Rep. Martha Griffiths, Detroit Democrat, are in strategic positions to affect committee work. MSMS input, in concert with the AMA Washington Office, will involve contacts with the two Michigan representatives subsequent to the public hearings. Chairman Wilbur Mills indicates hearings will be concluded this year, but executive sessions will be deferred to 1972 on the bill.

GGEST DECLINE in U.S. population of children under 5 during the past
ntury was recorded in the last decade. Washington Center for Metropolitan
udies reports that population of children under 5 in the nation dropped
.5 per cent.

AMA IS SUPPORTING a proposal to provide up to $150,000 in federal mortgage guarantees as an incentive to encourage physicians to establish solo or group practices in designated shortage areas. Known as the "Medical Group Practice Insurance Amendments," the proposal was introduced by Senator John Sparkman, Alabama Democrat.

MERLIN K. DUVAL, MD, HEW assistant secretary for health, will address 36 osteopathic students at the first convocation of the MSU College of Osteopathic Medicine, Oct. 8. The first two osteopathic classes are completing their training at the Pontiac school.

AN OUTBREAK of 23 illnesses consistent with hand, foot and mouth syndrome were reported to the Marquette Health Department as of Sept. 24. The Stat Health Department asks that other cases in the UP be reported to the Dept.

EFFORTS ARE UNDERWAY to assure adequate physician participation in the "Workshop on Joint Commission Accreditation Standards" at the Ramada-Metro Inn near Detroit Metropolitan Airport, Nov. 5-6. The program is co-sponsored by MSMS and the Michigan Hospital Association. Write for program: Michigan Hospital Association, 2213 E. Grand River, Lansing 48912.

U.S. BUREAU OF LABOR Statistics reports that the Consumer Price Index for July-August was up .3 per cent on all items in the nation, and up .5 per cent for health care. In Detroit, the all-items classification was up .9 per cent, and health care up .6 per cent.

THE FLORIDA NURSING Home Association has filed suit against HEW and the State of Florida, charging that the Florida Medicaid program is not being conducted in accordance with federal law and that it is not properly funded.

FIVE NEW MEDICAL SCHOOLS have opened this fall, bringing the total of U.S Schools to 108. New schools will be admitting 500 freshman students each year by 1975.

KIPLINGER WASHINGTON LETTER predicts that there will be a compromise on the national health insurance issue "providing private insurance for all employees on their ordinary illnesses and government insurance on catastrophic, with employers to pay for most of this."

MEDICAL DATA stickers available: Patients are exhibiting renewed interest in securing a sticker for the reverse side of their driver's license to indicate any medical conditions which should be known if an emergency arises. Physicians may request the stickers, at no charge, by writing Herbert Mehler, MSMS, Box 950, East Lansing 48823.

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1971 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

Second Class Postage Paid at East Lansing, Mich.
and at additional mailing offices.

UNIVERSITY OF CAL
LIBRARY SCH OF MED
THIRD & PARNASSUS AVE
SAN FRANCISCO CAL 94122

Michigan Medicine

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
OCT 25 1971

The 50 medical students placed by MSMS for summer orientation programs in Michigan community hospitals learned by working side-by-side with Michigan doctors of medicine. Here, the student, Tom Carzoli, a second-year medical student from Wayne State University School of Medicine, discusses a patient's record with Thomas Myers, M.D., of Nashville. See pages 932-934 for details of the SAMA-MSMS-MHA cooperative program.

BE SURE TO READ IN THIS ISSUE:

A COUNTY MEDICAL EXAMINER'S OFFICE
SOCIOLOGICAL ASPECTS OF CADAVER RENAL TRANSPLANTATION
GUILMET v. CAMPBELL—CRISIS? CONFUSION? COMEDY?
GUIDELINES FOR ATTACKING HEALTH PROBLEMS
HOW TO PUT MAN TOGETHER AGAIN

Patients fell asleep quickly

Dalmane (flurazepam HCl) 30 mg reduced awake time—both before and after falling asleep - by fifty percent of pretreatment values in patients with insomnia.[1,2]

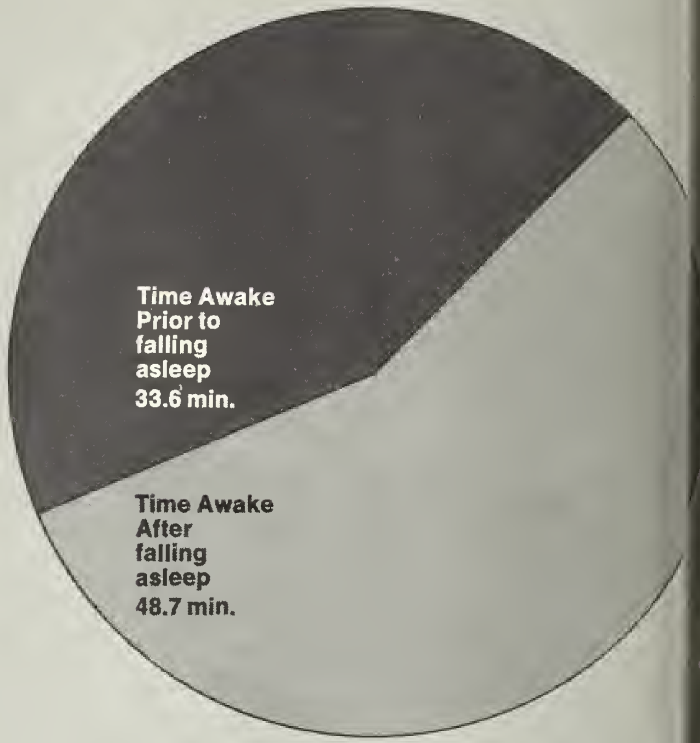
Two sleep laboratory studies recently confirmed findings of earlier studies of this type, namely, that Dalmane 30 mg was effective in patients who had trouble falling asleep, staying asleep or both. One 30-mg capsule of Dalmane usually induced sleep within 22 minutes, decreased the number of awakenings and the wake time after the onset of sleep, and provided 7 to 8 hours of sleep without need to repeat dosage during the night.

These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electroencephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hangover" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

Before Dalmane (flurazepam HCl)

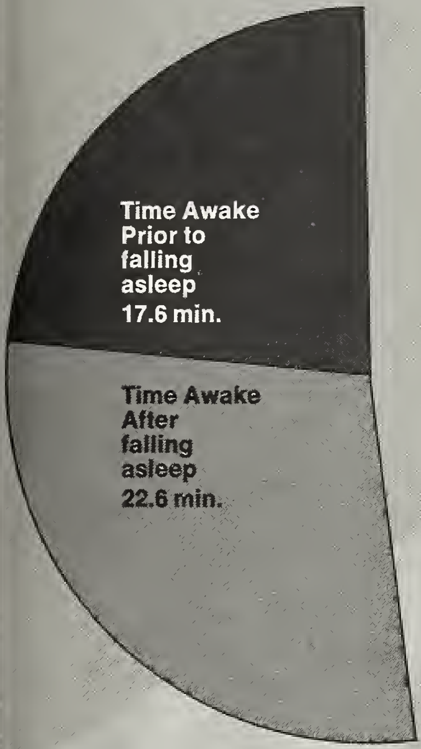


References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

Measurements of sleep in the sleep laboratory are obtained with electroencephalographic, electro-oculographic and electromyographic recordings.

ınd slept through the night

On
Dalmane
(flurazepam HCl)



ge sleep laboratory measurements in cited studies

meter	Before Dalmane	On Dalmane
required to fall asleep	33.6 min.	17.6 min.
time after onset of sleep	48.7 min.	22.6 min.
ıer of wakeful periods after set of sleep	12.2	8.4
sleep time	420.0 min.	447.5 min.
sleep percent	88.6	94.5

inical effectiveness as oven in the sleep laboratory

Dalmane®

lurazepam HCl)

30-mg capsule h.s.—usual adult dosage.
15-mg capsule h.s.—initial dosage for
erly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

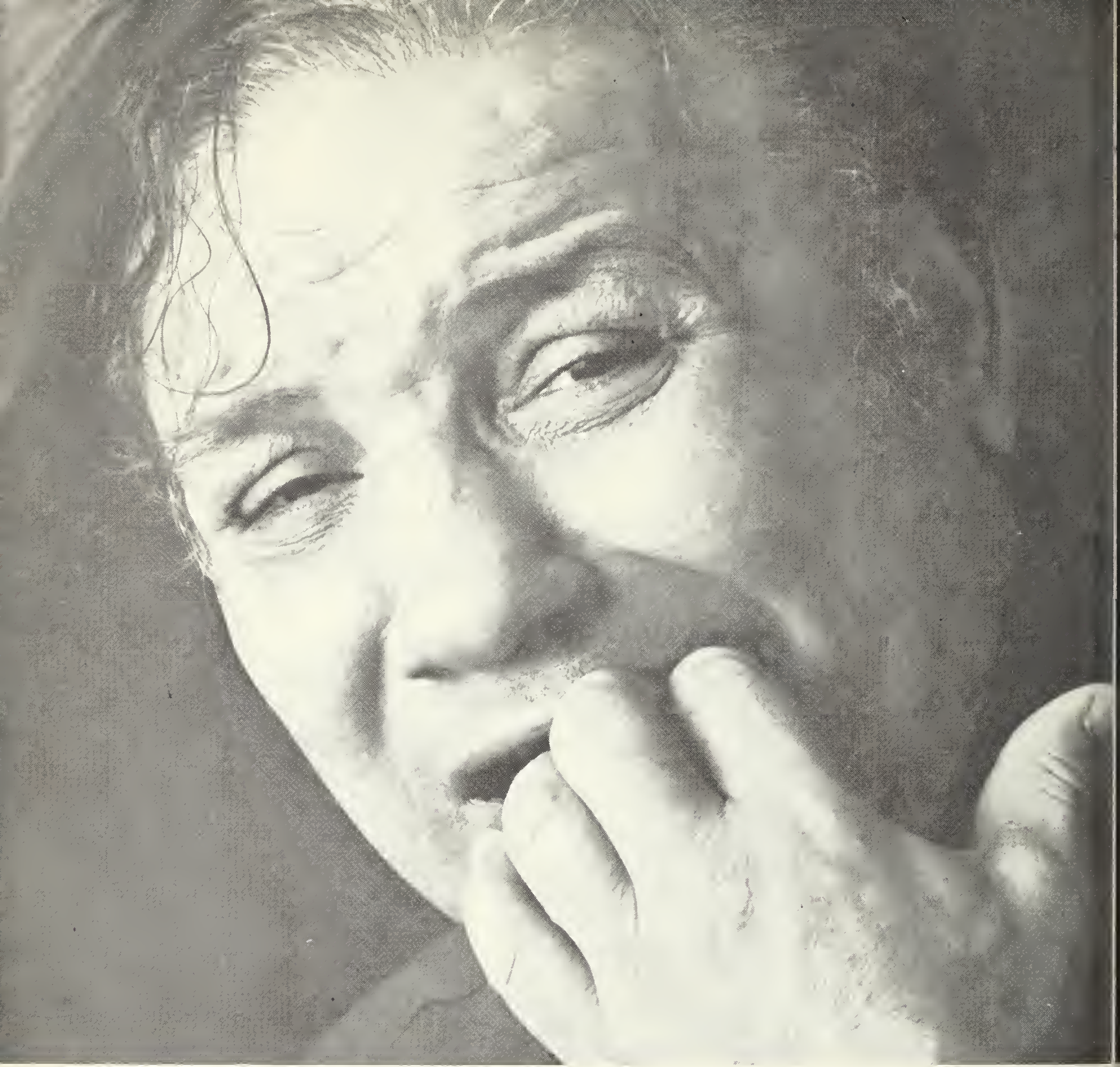
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



D -7011

Who's afraid of the
big bad enema?

We all are. But Dulcolax is the cure for enemaphobia. It can do almost anything an enema can — except look scary.

Just one suppository usually assures a predictable bowel movement in 15 minutes to an hour. Gone are the tubing, the "accidents", and the bruised egos associated with enemas.

For preoperative preparation, the combination of tablets at night and a suppository the next morning usually cleans the bowel thoroughly. Suppositories may also be particularly helpful when straining should be avoided as in postoperative care.

As with any laxative, abdominal cramps are occasionally noted. The drug is contraindicated in the acute surgical abdomen.

Dulcolax®...it's predictable
bisacodyl

Geigy GEIGY PHARMACEUTICALS, DIVISION OF GEIGY CHEMICAL CORPORATION, ARDSLEY, NEW YORK 10502 UNDER LICENSE FROM BOEHRINGER INGELHEIM G.M.B.H.

Michigan Medicine

IN THIS ISSUE

SCIENTIFIC ARTICLES

895 A county medical examiner's office: The roles of physicians in private practice and the hospital-based pathologist; R. Craig Barlow, MD; Robert C. Hendrix, MD
901 Sociological aspects at a municipal hospital of cadaver renal transplantation; Sister Martha Marie Lichon, MSW; Yoshikazu Morita, MD; James Pierce, MD; J. C. Rosenberg, PhD
905 Laparoscopy in a small community hospital; E. S. Woodworth, MD
911 Cholangiocarcinoma associated with Thorium Dioxide (Thorotrast): Report of a Case; Alexander N. Rota, MD, MSc; Howard K. Weindling, MD; Paul G. Goodman, MD
915 Elevations of the Serum Alkaline Phosphatase after Infusions of Albumin; W. R. Clark, MD
917 Renal lesions in streptococcal pyoderma; Gerald S. Light, MD; William W. Nicholls, MD
919 Atrial fibrillation and hypokalemia; Sonia A. Ramirez, MD; Michael C. Kozonis, MD; Donald C. Overy, MD

SPECIAL ARTICLES

932 50 Students Learn at Michigan Community Hospitals; MSMS Project; Suzanne Stephan
938 Guilmet v. Campbell; Crisis? Confusion? Comedy?; A. Stewart Kerr
946 Results of State Screening Program
956 Economist Outlines Alternatives for Attacking Health Problems; Clyde T. Hardwick, PhD
975 How To Put Man Together Again; The Rev. Robert B. Reeves, Jr.

OTHER FEATURES

888 President's Page
900 The Viewbox
924 Perinatal Tips
936 Medical Care Programs
943 Mediscene
949 Ancillary
961 About Doctors
964 Medicolegal
967 Monthly Surveillance Report
978 In Memoriam

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published Semi-Monthly, Trimonthly in January and December; 26 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351. © 1971 Michigan State Medical Society.

SCIENTIFIC EDITOR
John W. Moses, MD

EXECUTIVE EDITOR
Herbert A. Auer

MANAGING EDITOR
Judith Marr

PUBLICATION COMMITTEE

Robert M. Leitch, MD
Battle Creek
Chairman

Donato F. Sarapo, MD
Adrian

Edward J. Tallant, MD
Detroit

INFORMATION FOR CONTRIBUTORS

1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size (8½ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.

2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.

3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by Michigan Medicine.

4. Articles should ordinarily be less than four printed pages in length (3000 words).

5. References should conform to *Cumulative Index Medicus*, including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.

6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. New items and notes are welcome.

7. It is understood that material is submitted for exclusive publication in Michigan Medicine.

President's Page

MSMS Is Moving Forward; Your Help Is Needed

H. H. Hiscock, M.D.
MSMS President

As I complete my year as president of MSMS let me assure you that the Michigan State Medical Society is constantly improving its services to the physician-members, patients, and to the general public . . . and there is an important role to play for each member.

Typical of the improved services are these three—the Department of Governmental Relations features now a doctor-of-the-week as a legislative extension in the capitol and needs more volunteers . . . the new Bureau of Economic Information in the Department of Operations and Economics is beginning to give us data from its first survey . . . and the Department of Communications instituted the one page of Medigrams twice monthly to help us read about breaking developments.

Recently a questionnaire was received by every member asking him what he would like MSMS to do for him and the public. The questionnaire seeks to evaluate the wishes and attitudes of the members. The returns are being tabulated and will be studied carefully by the elected leaders, the committees, the staff.

The Council has an active Committee on Planning and Priorities which fills a need and opens new doors.

WHEN ANY PHYSICIAN raises negative questions about why he should be a member of MSMS or about what MSMS is doing for him, I always ask him to make a list of the positive things that MSMS is doing and then also a list of his complaints. Many doctors can come up with one or two criticisms or complaints. The list of reasons for being an active member in his professional medical society usually is the much longer list.

I know of no organization which is organized in such a truly democratic way, or which sincerely seeks out the contributions of each member. MSMS today is carrying out the projects that the members have chosen over the years through the actions of the MSMS House of Delegates. The House is constituted on a representative basis and does represent the members. Any member can ask his delegate to introduce a resolution and any member can testify before reference committees. Any member may volunteer to serve on MSMS committees—and hundreds of members do help shape and direct the work of the many committees.

I HAVE BEEN ON the MSMS Council for 20 years, under the able leadership of many dedicated physicians. I wish I could name all of them, but that is not possible. New leaders from all sections of the state always come along to replace the exeperienced officers and chairmen, and do a better job. The present MSMS Council includes active, young physciians trying to improve services for the members and the public. Because of this, I am optimistic that the delivery of health care will continue to be under the control of physicians and their medical associations.

Thank you for the opportunity to serve as MSMS preisdent this past year. It was a challenging year. And I wish the new MSMS president, Doctor Adler, the best and offer my cooperation.

IN ASTHMA
IN EMPHYSEMA

optional therapy

*

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula

First choice

MUDRANE-2

When ephedrine is too exciting or is contraindicated

MUDRANE GG

During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2

A counterpart for Mudrane-2

MUDRANE GG ELIXIR

For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217

Manufacturers of Ethical Pharmaceuticals

MICHIGAN STATE MEDICAL SOCIETY
AFRICAN ADVENTURE

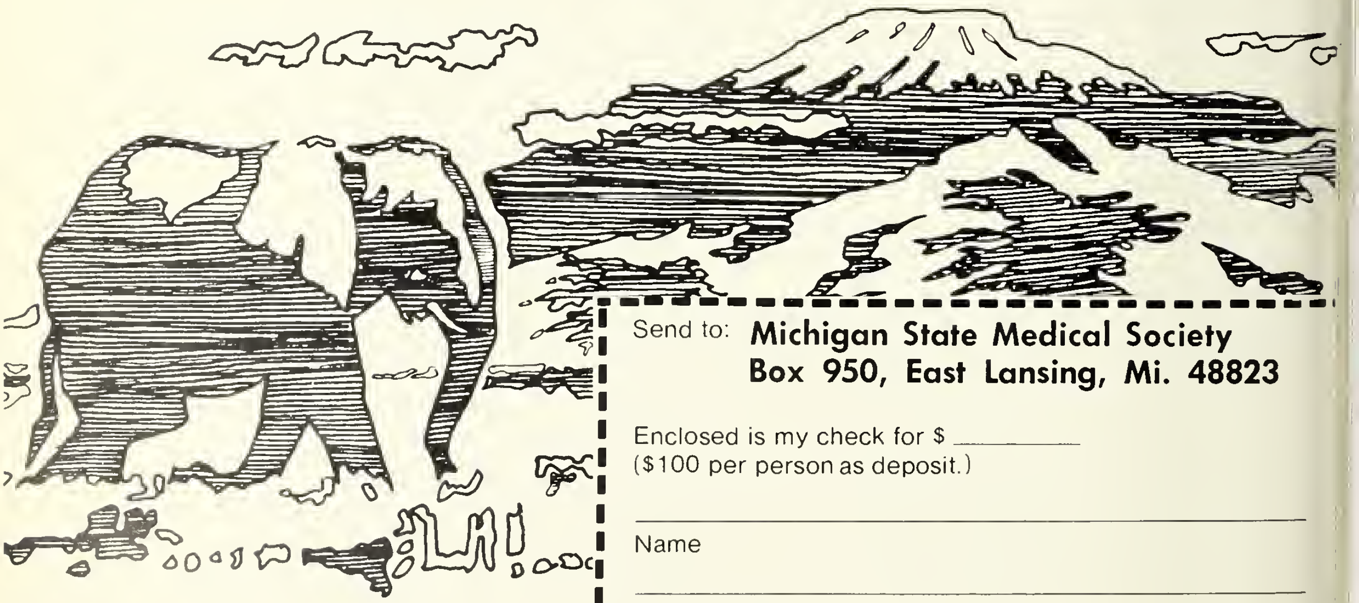
Monday, February 28, 1972
from Detroit

SPOIL YOURSELF WITH A VISIT TO UNSPOILED AFRICA

Our two week completely non-regimented Adventure offers you the continent of Africa ...its magic, its excitement and its unspoiled beauty. All for only $968. African Adventure includes these exclusive features at charter cost savings:

- Direct flights via private jet
- The finest first class hotels
- Complete American breakfasts
- Dinners at a selection of the finest restaurants
- 70 pound baggage allowance...expedited custom facilities
- Optional sightseeing tours...plenty of time for shopping
- Five hosts always available to assist you
- Never any regimentation...do as you please

Space is limited. Complete the reservation form below and return it today.



Send to: **Michigan State Medical Society**
Box 950, East Lansing, Mi. 48823

Enclosed is my check for $ ________
($100 per person as deposit.)

Name ________________________

Home Address ________________________

City State Zip Code Phone ________________________

☐ Please send full color brochure.

check these figures...

they could lead to savings

Umbrella Excess Liability Policy — Our Schedule

- ✓ **Physicians Class 1 & 2 . . $121.00 Annual Premium***
- ✓ **Physicians Class 3, 4 & 5 . $205.00 Annual Premium***

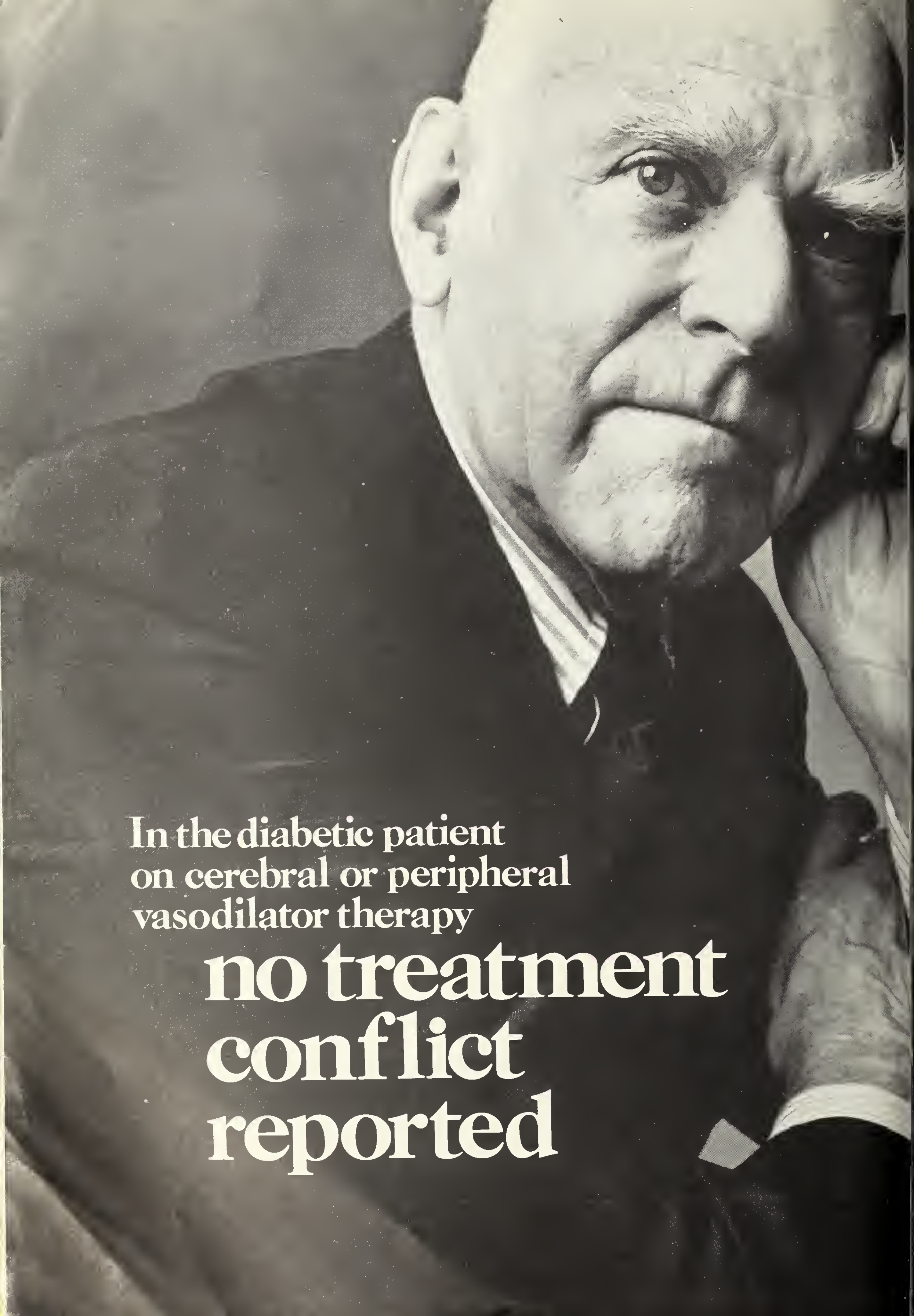
* The above premiums assume ownership or use of 2 residences, 2 automobiles, professional liability exposure (basically insured for $100,000/$300,000), and professional office premises exposure. These premiums do **not** include basic Malpractice coverage. The Umbrella plan is sponsored by the Michigan State Medical Society while the basic Malpractice policy is **not**.

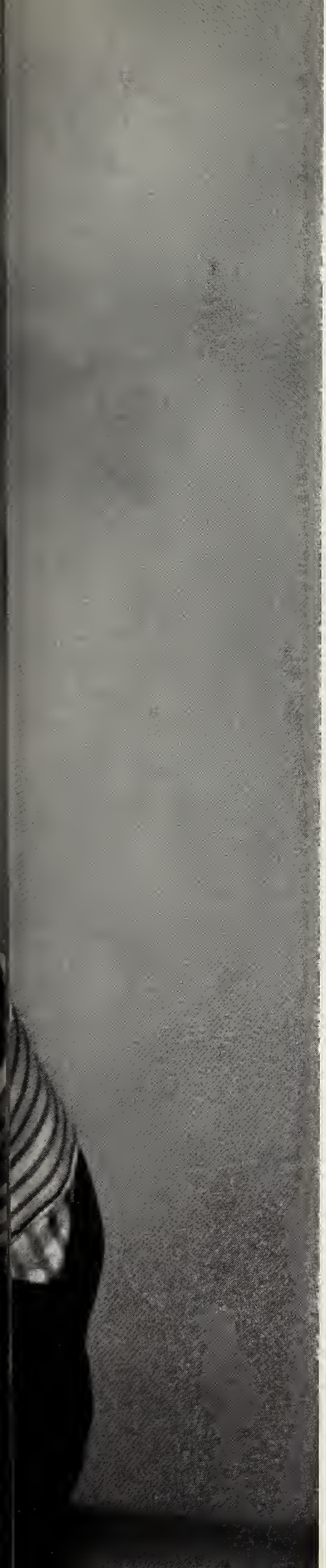
CALL US COLLECT (517) 484-2578

bps **BEN P. STRATTON AGENCY, INC.**
ESTABLISHED IN 1937

107 N. BUTLER BLVD.
LANSING, MICHIGAN 48903
(517) 484-2578

19400 WEST TEN MILE ROAD
SOUTHFIELD, MICHIGAN 48075
357-5083


In the diabetic patient
on cerebral or peripheral
vasodilator therapy
no treatment
conflict
reported



VASODĪLAN®
(ISOXSUPRINE HCl)
the compatible vasodilator

- no interference with diabetic control …does not alter carbohydrate metabolism.[1]
- conflicts have not been reported with diuretics, corticosteroids, antihypertensives or miotics.
- complications in the treatment of coronary insufficiency, hypertension, peptic ulcer, glaucoma and liver disease have not been reported.

In fact, there are no known contraindications in recommended oral doses other than it should not be given in the presence of frank arterial bleeding or immediately postpartum.

Although not all clinicians agree on the value of vasodilators in vascular disease, several investigators[2-5] have reported favorably on the effects of isoxsuprine. Effects have been demonstrated both by objective measurement[3,5] and observation of clinical improvement.[2,4] Indications: Cerebrovascular insufficiency, arteriosclerosis obliterans, diabetic vascular diseases, thromboangiitis obliterans (Buerger's disease), Raynaud's disease, postphlebitic conditions, acroparesthesia, frostbite syndrome and ulcers of the extremities (arteriosclerotic, diabetic, thrombotic). Composition: VASODĪLAN tablets, isoxsuprine HCl 10 mg, and 20 mg. Dosage: Oral—10 to 20 mg. t.i.d. or q.i.d. Contraindications and Cautions: There are no known contraindications to recommended oral dosage. Do not give immediately postpartum or in the presence of arterial bleeding. Side Effects: Occasional palpitation and dizziness can usually be controlled by dosage reduction. Complete details available in product brochure from Mead Johnson Laboratories. **References:** (1) Samuels, S. S., and Shaftel, H. E.: J. Indiana Med. Ass. *54*:1021-1023 (July) 1961. (2) Clarkson, I. S., and LePere, D. M.: Angiology *11*:190-192 (June) 1960. (3) Horton, G. E., and Johnson, P. C., Jr.: Angiology *15*:70-74 (Feb.) 1964. (4) Dhrymiotis, A. D., and Whittier, J. R.: Curr. Ther. Res. *4*:124-128 (April) 1962. (5) Whittier, J. R.: Angiology *15*:82-87 (Feb.) 1964.

Mead Johnson
LABORATORIES

© 1971 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U.S.A. 184D71

Now in a
200-ml.
Unbreakable
Plastic
Bottle

Same price as
150-ml. size*

Two dosage
strengths–
125 mg./5 ml.
and
250 mg./5 ml.

V-Cillin K,® Pediatric

potassium
phenoxymethyl
penicillin

Lilly

100210

*Additional information
available to the
profession on request.*

Eli Lilly and Company
Indianapolis, Indiana 46206

**Based on Lilly selling price to wholesalers.*

A county medical examiner's office:

The roles of physicians in private practice and the hospital-based pathologist

By R. Craig Barlow, MD
Robert C. Hendrix, MD
Ann Arbor

Many Michigan counties replaced their elected coroners by medical examiners under provisions of a law passed in 1953 which gave this option to the counties. A law passed in 1969 *requires* each county to establish a medical examiner system either independently or in cooperation with adjacent counties.

Members of the medical profession will be expected to serve as the staff of the newly-formed systems as they have done in the counties which made the change earlier. Densely populated areas should establish medical examiners' offices with a central staff that will spend most, if not all, of their time in medico-legal investigation. Wayne and Oakland are the only counties with this arrangement at present. Even in these areas private physicians can make important contributions to their community by part time service. Outside the metropolitan areas the full time office is not needed, and the service will be rendered by private and hospital-based physicians. Many physicians are reluctant to undertake this responsibility.

The authors (one of whom [RCB] is an internist in private practice, the other a hospital-based pathologist) believe that much of this reluctance is due to an erroneous estimate of the amount of time involved and to the belief that this is "police work." We hope that our experiences with the Office of the Medical Examiner of Washtenaw County will clarify some misconceptions and will cause other physicians to become interested in this important community activity.

The medical examiner is charged with investigation of violent deaths, unexpected deaths, deaths without medical attention, deaths following abortion, and deaths in city or county jails. He is expected to determine the medical cause of death and the manner of death (i.e., homicide, suicide or accident) when applicable. He will be assisted by the police in his investigation, and his medical opinions will assist the police in their investigation.

The work load of any county medical examiner system will vary with the population being served. It is perhaps easier to predict the number of cases to be investigated in proportion to the number of deaths in the county, but the relationship is not linear. Social and economic factors associated with density of population cause increases out of proportion to the population differences. In Emmet County, Michigan (population 16,000) about 15 percent of all deaths were reported to the Medical Examiner;[1] in Wayne County (population 2,700,000) the figure is about 36 percent.[2] In Washtenaw County (population 275,000) about 20 percent of all deaths are investigated by the office of the medical examiner. This figure for Washtenaw County has increased slowly over a period during which population was increasing substantially but the number of deaths was not (Table 1).

Table 1

Medical Examiner's Investigations
In Washtenaw County

	Total Deaths	Number	Percent
1959	2236	269	12.0
1960	1177	217	9.5
1961	2324	280	12.0
1962	2364	274	11.6
1963	2446	279	11.4
1964	2419	321	13.3
1965	2484	341	13.7
1966	2475	358	14.5
1967	2483	364	14.7
1968	2463	405	16.4
1969	2552	490	19.2

Doctor Barlow is engaged in the private practice of internal medicine, and Doctor Hendrix is professor of pathology at the University of Michigan.

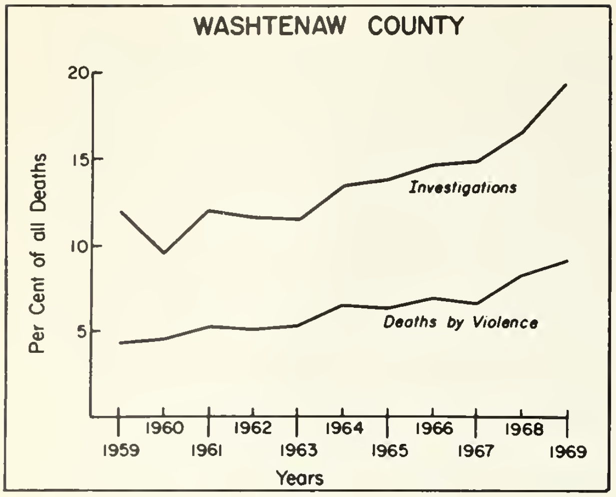


Figure 1

Although medical examiners are pictured as dealing with homicide, most of their work will result in the elimination of homicide as a manner of death. Actually, most of the cases in Washtenaw County are non-violent (**Fig. 1**) and other counties may expect an even larger percentage of medical, public health and industrial health problems in the medical examiner's experience.

We recognize some unique features in Washtenaw County in that there are four large hospitals which draw patients from wide areas. Only about half the deaths recorded in the county each year are of residents of the county. Serious injuries inflicted in other areas may terminate fatally in one of the hospitals and thus become the responsibility of the Washtenaw County Medical Examiner. Other counties which have major medical centers will experience the same situation. The population has increased markedly in the past 10 years and has changed somewhat in character. The growth of heavy industry and the changing attitudes of the students in the two universities has had recognizable effect (**Fig. 1**).

The Board of Commissioners of Washtenaw County has designated the county health officer as the medical examiner. This arrangement has worked out very well because general medical knowledge and the administrative machinery of the health department could be used for the part time operation of the office of the medical examiner. About 50 physicians have been appointed as deputy medical examiners. These are all in private practice except for a few members of the staff of The University of Michigan Medical Center who function chiefly within that institution.

Deputy medical examiners are situated in all of the cities and towns of the county so that geographic coverage is uniform, and no one will waste much time on the road. The work load of the individual deputy medical examiners varies with their location and with their interest. Police agencies soon learn to know the examiner who will respond and who will make a thorough investigation.

The maximum number of calls taken by any one deputy medical examiner in a year was 55; another made about 47 investigations in his busiest year. All of the others are much lower. About 25 percent of all calls are from hospitals. There is no need for great haste in responding to these calls, and, when the physician on duty in the emergency room is a deputy medical examiner, no additional trip is required.

Police and ambulance operators are instructed to transport injured persons to a hospital where adequate attention can be given unless death is absolutely certain. This is done for the benefit of the injured, of course, but it does concentrate medical examiner's cases. The average time spent is about one hour per case. Some take longer; others are completed by a few questions to police, witnesses, relatives, or attending physicians.

Court appearances have not been a serious drain on physicians' time in Washtenaw County. Very few of the cases investigated end up in court; all of those have had autopsies, so the pathologist's testimony is adequate, once the chain of evidence has been established. The courts of this county and most others to which we have gone, are most considerate of the physician's time and obligations elsewhere. This did not "just happen"; it is the result of friendly negotiations with judges and attorneys. Occasionally a deputy medical examiner will be seriously inconvenienced by a court appearance, either due to unforeseen circumstances or a failure on the part of the attorney to be considerate; this is very rare. Civil cases can be time-consuming in court, but the medical examiners are rarely called on these.

The Office of the Medical Examiner of Washtenaw County has not found it necessary to establish a complex and confining "on call" system. Each police agency and hospital has a list of all Deputy Medical Examiners with telephone numbers and other instructions for making contact. They attempt to call the medical examiner closest to the scene, but continue calling until someone responds. It has proved to be a very workable system.

The new awareness of the police, attorneys and courts of the necessity for scientific evidence whenever possible makes them most appreciative of the contributions made by the Medical Examiner. The police, in particular, recognize this cooperation as a major factor in their own move toward a higher level of professionalism. Deputy medical examiners of Washtenaw County, like those in other jurisdictions, are not paid at a level which compensates for the time lost from their practices. They continue as deputy medical examiners because they find the work interesting and a source of variety in their professional lives and because they are willing to perform this community service which is so much superior to the old elected coroners' investigation of violent and unexpected deaths.

Complete investigation and documentation of some deaths will require an autopsy. Each jurisdiction will establish its own guide lines based in part on the desire of the prosecuting attorney or the demand of the courts for highly detailed descriptions. Between 25 and 50 percent of investigated cases should be referred for autopsy (**Table 2**). Some important information will be missed at a lower figure; a higher figure indicates either a series of unusual circumstances or that autopsies are being used as a substitute for good field investigation.

Table 2

Autopsies Ordered by the Office of the Medical Examiner

		Autopsies	
	Investigations	Number	Percent
1959	269	44	16.4
1960	217	75	34.6
1961	280	110	39.3
1962	274	126	46.0
1963	279	91	32.6
1964	321	123	38.3
1965	341	148	43.4
1966	358	168	46.9
1967	364	167	45.9
1968	405	244	60.2
1969	490	267	54.5

There are many pathologists associated with the hospitals in Washtenaw County and several of them are deputy medical examiners. The pathologists do not make on-the-scene investigations as frequently as do the other deputy medical examiners but are available in special situations.[3]

Because of the particular interest of one of the present authors (RCH) the Department of Pathology at The University of Michigan Medical Center does the majority (but by no means all) of the medico-legal autopsies in the county. Medico-legal investigation is a very small part of the activities of the Department of Pathology just as it is a small part of the professional activity of all of the deputy medical examiners. This part-time experience can be that of any pathologist in the state; although volume of work will vary considerably. The information presented here is the experience of a single group of pathologists; it is not the total experience of the Office of the Medical Examiner of Washtenaw County, nor is it limited to cases derived from that source.

The experience of the Department of Pathology in forensic pathology up to and including 1954 was summarized and reported in 1957.[4] Since that time additional experience has been gained, and the role of the department of pathology has changed somewhat. Prior to the establishment of the Office of the Medical Examiner of Washtenaw County in 1958, the department accepted cases from the coroners of the county for necropsy, but played little or no part in the total medico-legal investigative process. Since the Office of the Medical Examiner was established several staff members of the department have been appointed as deputy medical examiners and participate in the total functions of the office. There has been a quantitative and qualitative increase in medico-legal investigations in recent years. As indicated previously an increased incidence of violent and/or unexplained death has accompanied the increase of population and the change in character of the population.

When a patient dies in any of the hospitals in the county, the house staff routinely requests permission for necropsy from the next of kin. Even when a death requires medico-legal investigation, the Office of the Medical Examiner usually accepts the findings of the "hospital" necropsy, but on occasion may prefer to issue a formal order even if the next of kin has consented. Not all of the necropsies presented in this summary have been ordered by the Office of the Medical Examiner. All have been, or should have been, investigated by that office. A complete necropsy report is sent to the medical examiner for cases ordered by him; a short summary is submitted for the others. Cases have been included in which death was due to violence, was unexplained, was without medical attention, followed abortion, or occurred in jail.

The changing volume of medico-legal work is shown on an annual basis in **Table 3.** There has been a substantial, absolute and relative increase over the period covered by the report. The increase has not been uniform from year to year, but three plateaus have been grouped rather arbitrarily to emphasize these plateaus. **Table 4** compares the absolute and relative number of medico-legal necropsies done during the last three years of operation of the Office of Coroner in Washtenaw County, and the first five years under the jurisdiction of the medical examiner; there were no important numerical changes produced by the transition. The third and fourth periods were separated from the second and from each other by an increase in the percentage of medical examiner necropsies.

In addition to determining the medical cause of death, the medical examiners have the duty of determining the manner of death. Making the distinction between homicidal, suicidal, accidental or natural deaths is the chief aim of the investigation. The absolute and relative numbers of deaths in

Table 3

Medico-Legal and Medical Examiner's Necropsies In Relation to Total Necropsies At University of Michigan Medical Center

Year	Total ML Necropsies	Medical Examiner's Cases No.	Medical Examiner's Cases % of ML	Total Necropsies	Med. Legal % of Total	Med. Exam. % of Total
1955*	31	11	35	290	11	4
55-56	58	22	38	595	10	4
56-57	51	24	46	573	9	4
57-58	69	22	32	567	12	4
58-59	56	24	43	507	11	5
59-60	44	10	22	570	8	2
60-61	68	24	35	563	12	4
61-62	59	11	18	610	10	2
62-63	84	24	29	616	14	4
63-64	79	41	51	545	15	8
64-65	80	40	49	586	14	7
65-66	73	45	62	545	13	8
66-67	65	45	69	585	11	8
67-68	127	79	62	637	20	12
68-69	174	111	63	707	25	16
TOTAL	1118	533		8496		

---

*Data for six months only

Table 4

Necropsy Cases At University of Michigan Medical Center:

Condensation of Data from Table 3

Year	Total ML Necropsies	Medical Examiner's Cases No.	Medical Examiner's Cases % of ML	Total Necropsies	Med. Legal % of Total	Med. Exam. % of Total
1955-58	209	79	37	2025	10	4
58*-63	311	93	30	2866	11	3
63-67	297	171	57	2261	13	8
67-69	301	190	63	1344	22	14
TOTAL	1118	533		8496		

---

*The Medical Examiner System was instituted late in 1958.

Table 5

Necropsy Cases At University of Michigan Medical Center:

Manner of Death

Year	Total	Homicides No.	Homicides %	Suicides No.	Suicides %	Accident No.	Accident %	Natural No.	Natural %	Unknown No.	Unknown %
1955	31	1	3.2	4	12.9	21	67.8	3	9.7	2	6.4
55-56	58	4	6.9	6	10.6	36	62.2	8	13.8	4	6.9
56-57	51	4	7.8	5	9.8	29	56.8	13	25.5	0	0
57-58	69	1	1.4	6	8.7	48	69.5	14	20.1	0	0
58-59	56	4	7.1	11	19.7	29	51.8	11	19.7	1	1.8
59-60	44	2	4.5	7	15.9	34	77.5	1	2.3	0	0
60-61	68	4	5.9	10	14.7	48	70.6	4	5.9	2	2.8
61-62	59	2	3.4	11	18.6	39	66.1	5	8.5	2	3.4
62-63	84	0	0	9	10.7	56	66.7	14	16.7	5	6.0
63-64	79	6	7.6	7	8.9	54	68.4	11	13.9	1	1.3
64-65	80	1	1.2	15	18.7	53	66.3	7	8.7	4	5.0
65-66	73	3	4.1	7	9.6	46	63.0	12	16.4	5	6.8
66-67	65	9	13.8	7	10.7	42	64.5	7	10.7	0	0
67-68	127	16	12.6	15	11.8	65	51.2	27	21.2	4	0
68-69	174	18	10.3	26	14.9	98	56.4	32	18.4	0	0
TOTALS	1118	75	6.7	146	13.0	698	62.5	169	15.1	30	2.7

these categories as seen in our necropsy service are presented in **Table 5.** The relative numbers of natural deaths in the series is low because of the large numbers of deaths in hospitals in the county; these rarely require investigation. The manner of death has not been determined for the cases listed as unknown. For most, the cause has been determined, but there are a few that are completely unknown.

For many years the average number of homicides that we saw annually was about five. Three years ago there was a sudden increase. This reflects, in part, an increase in the number of homicides in the county, but some of these originated elsewhere. Homicides by negligence, usually related to traffic violations, have not been included in this group. Not all of these cases called homicide by the medical examiner have been subject to adjudication. The means of homicide and their frequencies are present in **Table 6** and are compared with the methods used for suicide.

Table 6

Necropsy Cases At University of Michigan Medical Center: Methods of Homicide and Suicide

	Homicide		Suicide	
	No.	%	No.	%
Total	75	100	146	100
Firearms	28	37.3	41	28.0
Beating	19	25.3	—	—
Stabbing/Cutting	10	13.3	2	1.4
Fire/Scald	5	6.7	5	3.4
Drowning	3	4.0	3	2.1
Fall/Push/Jump	2	4.0	8	5.3
Strangling/Hanging	2	2.7	13	8.9
Air embolization (abortion)	3	2.7	—	—
Poisoning	1	1.3	61	41.7
Automobile	1	1.3	6	4.1
Asphyxia	1	1.3	2	2.1
Pedestrian-train	—	—	2	2.1
Pedestrian-automobile	—	—	2	2.1

The only recognized homicide by poison was that of a child who died in a homicide-suicide situation; the poison was carbon monoxide from an automobile engine. The favorite poisons for suicide were carbon monoxide and barbiturates; each accounted for 14.4 percent of all suicides and 34.4 percent of suicides by poisoning.

The means of accidental deaths are presented in **Table 7.** Traffic deaths, as expected, comprise a large proportion of the cases. The number of deaths related to burns is high because of the reputation of the Burn Unit of the Department of Surgery. Use of the word *accident* in this connotation can never be abolished, but the elements of total inadventure, bad luck, or fate that are found in the definition of *accident* are often absent in these traumatic incidents; they are, all too often, the logical results of carelessness or recklessness.

Table 7

Necropsy Cases At University of Michigan Medical Center: Means of Accidental Deaths

Traffic		
Automobile driver or passenger	311	
Pedestrian	56	
Motorcycle	20	
Automobile and train	14	
Pedestrian and train	2	
Air craft	10	
Total		413
Falls	67	
Drugs	45	
Burns	105	
Firearms	11	
Other	57	
Grand Total		698

Conclusion

The effectiveness of the Office of the Medical Examiner of Washtenaw County depends upon the active participation, on a part-time basis, of physicians in private practice and in hospital-based practice. The medical examiners investigate about 400 cases a year without intolerable inconvenience to any one person. We are, in this endeavor, practicing one form of community medicine in an efficient manner. Each county in Michigan is unique and must develop a unique medical examiner system either independently or in cooperation with adjacent counties. Uniform methods of medico-legal investigation applying to the entire state are desirable. A system modeled after the Virginia Medical Examiner System[5] would be very serviceable in Michigan.

Acknowledgement

We wish to express our appreciation to Otto K. Engelke, MD, Medical Examiner of Washtenaw County for permission to use data compiled by his office and for his leadership since the Office of the Medical Examiner was established.

References

1. Weber, R.C. Personal communication.
2. Benton, J.F. Office of the Medical Examiner of Wayne County, Report of Activities and Statistics 1960-1969. 1970.
3. Huelke, D.F., and Gikas, P.W. Causes of deaths in automobile accidents. *JAMA* 203:1100-1107, March, 1963.
4. Hendrix, R.C. Experience in forensic pathology in a general university hospital and department of Pathology. *Univ. Mich. Med. Cen. Bull.* 23:69-76, 1957.
5. Mann, G. T. and Chapman, A.J. The Commonwealth of Virginia Medical Examiner System. Review and Appraisal of its first twenty years. Chapter 1 in *Legal Medicine Annual,* 1970. C.H. Wecht, editor. Appleton-Century-Crofts, New York, 1970.

The Viewbox

By Raymond S. Kurtzman, MD
Detroit

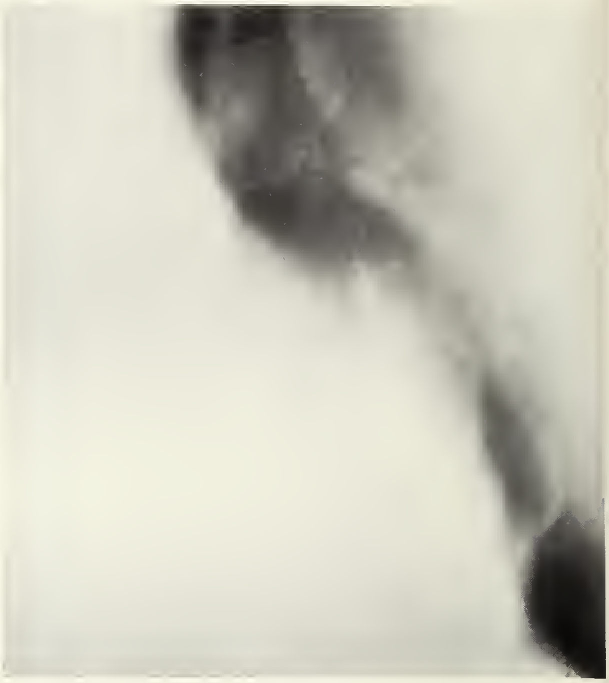


Fig. B

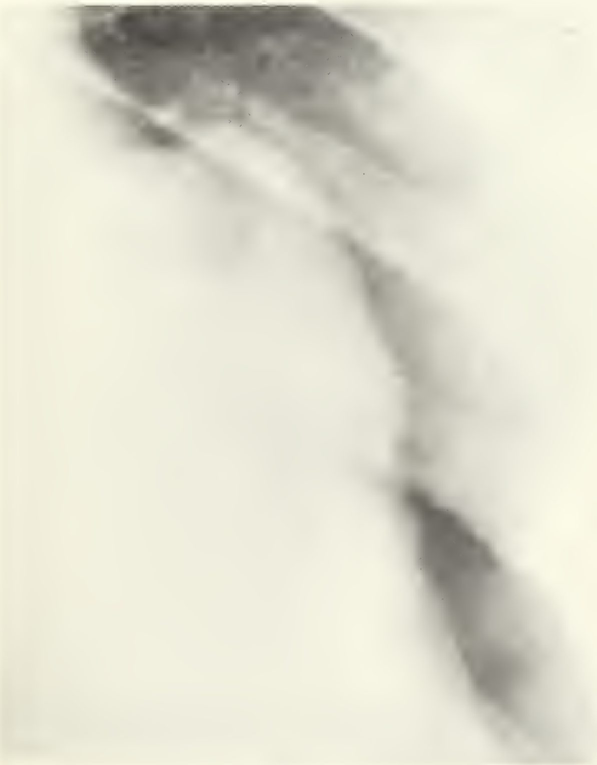


Fig. A

Diagnosis

Pericardial lipoma.

X-Ray Findings

There is a sharply demarcated but irregular ovoid mass adjacent to the left ventricle.

Discussion

Lipoma is one of the benign tumors of the pericardium. Characteristically it occurs at the left apex. Although it is more radiolucent than the heart, this difference in density is not usually conspicuous since it is contrasted with the much more lucent lungs. Pericardial lipoma is generally an incidental finding of no clinical significance. It is important only since it can be difficult to be certain that it is not another type of lesion such as a more ominous neoplasm. Almost all people have a "pericardial fat pad" which resembles lipoma microscopically. A fat pad is generally relatively small and triangular in shape. The example shown above is too large to represent a simple fat pad. It was recognized only because of localized pulmonary emphysema caused by bronchospasm during a bronchogram done for other reasons. Figure A is a spot film made during fluoroscopy; figure B is a body section radiograph.

Sociological aspects at a municipal hospital **of cadaver renal transplantation**

By Sister Martha Marie Lichon, MSW
Yoshikazu Morita, MD
James Pierce, MD
J. C. Rosenberg, MD, PhD

Knowledge and research in psychosocial aspects of disease must keep pace with medical-scientific advances if excellence in patient care is to be achieved.[1] Man's complexity relative to his psyche, society and disease demands this kind of holistic approach to problems in the health field.[2] Such an attitude is particularly important when providing medical care for underprivileged populations.[3]

The management of patients with chronic renal failure at an inner-city municipal hospital can be taken as a case in point. The initial unsatisfactory experiences with chronic hemodialysis at Detroit General Hospital have been reported.[4] As greater sophistication was attained with better equipment and more highly trained personnel, a renal transplantation program was initiated and more attention was given to psychosocial and socioeconomic considerations. However, a study of the contributions of human behavior specialists to the renal transplantation program revealed a deficiency in this area.[5] A psychiatrist and social worker subsequently joined the renal transplant team and participated actively in weekly conferences which considered most aspects of the patient's disease.

In order to improve the care of the total person, some basic psychosocial and socioeconomic facts were required pertaining to the patients who received a renal transplant at Detroit General Hospital. Similar information was deemed necessary for cadaver donors. A study was therefore initiated to answer the following questions: What is the sex, race, marital status, religion, education, occupation, economic and familial situation of the recipients and donors? What is the attitude of the recipients toward transplantation vis à vis chronic hemodialysis? What are some of the circumstances surrounding the donation of kidneys from cadavers? Who initiated the donation? What is the motivation of the "permit signer"? What differences, particularly economic, educational and social exist between recipients and donors when kidneys are transplanted in a municipal hospital and do these pose any special problems?

Methods

From May 1968 to December 1969, the Wayne State University School of Medicine Renal Transplantation Service performed 16 kidney transplants from cadaver donors at Detroit General Hospital. Twelve of these 16 patients were living at the time of this study. Two of the 16 were patients transferred from a private hospital for the transplant procedure and returned immediately to their private hospital. They were not included in this study. The recipient population which was studied consisted of 14 patients initially admitted to Detroit General Hospital for kidney transplantation and who remained in this hospital until discharged to their homes.

Of the cadaver donors, 10 were patients at Detroit General Hospital at the time of death and four were patients at private hospitals in the Detroit area. Severe injuries caused by automobile and occupational accidents, gunshot wounds, cerebral hemorrhage and cardiac arrest were the causes of irreversible coma. Two of the 28 kidneys salvaged from these donors were transported to other hospitals for transplantation.

Doctors Morita, Pierce and Rosenberg are with the Departments of Medicine, Urology and Surgery at Wayne State University School of Medicine and Detroit General Hospital, Detroit. Sister Lichon is presently Director of Human Relations and Rehabilitation, St. Elizabeth Hospital, Covington, Kentucky.

Please address reprint requests to J. C. Rosenberg, MD, Department of Surgery, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207.

This study was aided, in part, by a grant from Detroit General Hospital Research Corporation.

Data was collected from medical charts and by interviewing recipients. The immediate families (parents or spouse) of dead recipients and of cadaver donors were interviewed also. A questionnaire was designed to collect all needed data from the medical chart and the interview. It was possible to gather data only from the medical charts of one dead recipient and two donors because the families could not be located.

Results

Recipients

Data on the 14 kidney transplant recipients disclosed the following vital statistics: eight were males and six females; eight were Negroes and six white (**Figure 1**); all 14 were Protestant (**Figure 2**); seven were married and seven single; average age was 29.

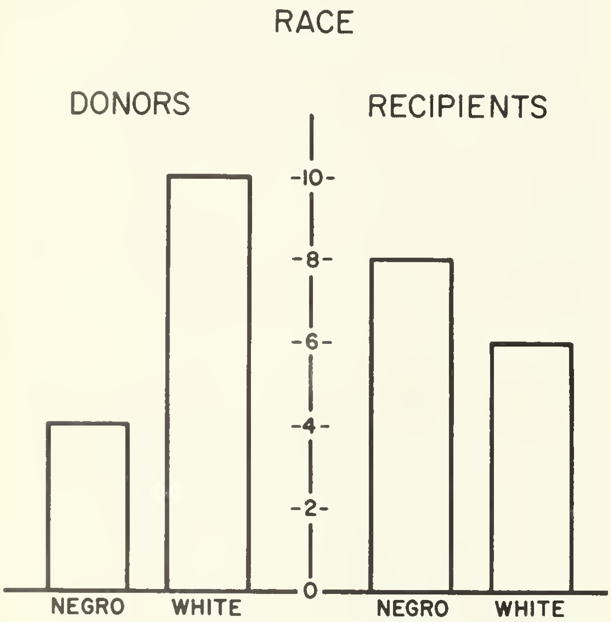


Fig. 1. Number of Negroes and whites among donors and recipients.

Education of the recipients differed quite widely since some were still students ranging from fourth grade to twelfth grade (**Figure 3**). One, a married adult, had attended elementary school to the third grade. At the time of the transplant no recipient had achieved an education beyond high school and only two were high school graduates. Six recipients were students, one an elementary school student; the others high school students. Of the remaining eight recipients, two were housewives, one a salesman, four were general laborers, and one, a young woman with ninth grade education, had no occupation.

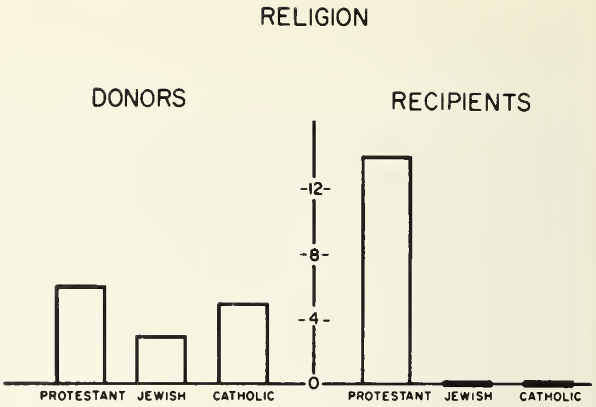


Fig. 2. Distribution of religions among donors and recipients.

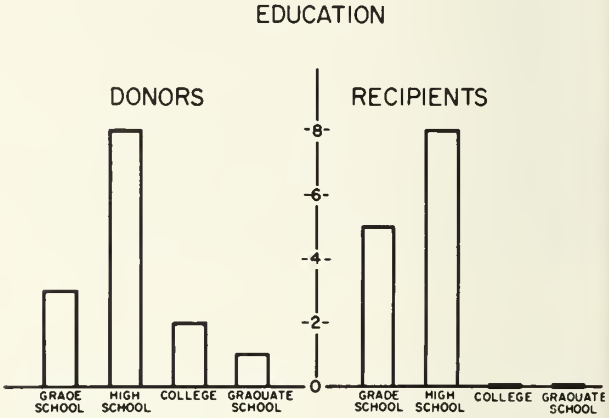


Fig. 3. Educational attainments among donors and recipients.

Annual income (of the parents in cases of the single recipients and of the recipients in cases of those who were married with families of their own) ranged from $4,000 to $12,000 annually (**Figure 4**). One married recipient and his family were supported through Welfare-General Assistance at the time of the transplant. Annual income

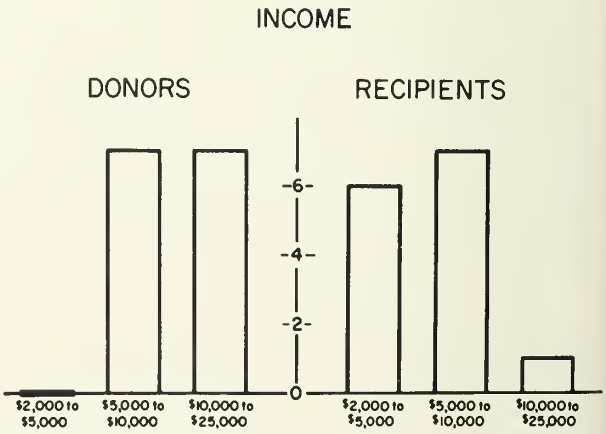


Fig. 4. Income level of donors and recipients.

of six of the recipients averaged below $5,000; four of these families consisted of parents and four children, one of parents and five children, and one of parents and one child. In six cases Medical Assistance (Title XIX) was utilized in payment of hospital costs. Three patients were partially dependent on Title XIX funds to pay hospital costs.

Six of the recipients lived in the inner-city, two in the suburbs, one on a farm, three in a small town outside Detroit and two just outside of what is considered inner-city (**Table 1**). Eight of the recipients, or parents if single, were buying their homes, four were renting and two were living with relatives. The estimated value of these homes ranged from $6,000 to $15,000.

Table 1

Housing Characteristics Of Recipients and Donors

		Donors	Recipients
Neighborhood	Inner City	4	6
	City	2	2
	Suburb	7	2
	Small town	1	3
	Farm	0	1
Home Ownership or rent	Home owner	8	8
	Rent	6	4
	Other	0	2
Value of homes	$6,000 to $10,000	6	9
	$10,000 to $20,000	2	3
	$20,000 to $45,000	6	0

The composition of recipient families was somewhat varied. In the cases of the seven married recipients, the number of children ranged from one to six. The majority had four children. In one instance, the recipient was separated from the spouse. The parents of three of the single recipients were divorced. The number of their siblings ranged from one to eight.

All of the 14 kidney transplant recipients were treated with hemodialysis for at least six months prior to receiving a cadaver kidney. Attitudes toward transplantation versus hemodialysis expressed by the 10 living recipients were all very positive in favor of transplantation. Without exception, each of the 10 felt that, regardless of any complication following transplantation, it was more comfortable to live physically, psychologically and socially with a kidney transplant than to be dependent upon a machine as in dialysis. As indicated earlier, one of the expired recipient's family could not be reached for an interview. The spouse of each of the other three dead recipients expressed mixed feelings regarding the question of kidney transplantation versus hemodialysis. None of these expressed completely negative feelings about transplantation but wondered whether their spouses might still be living if they had not undergone the transplant procedure. At the same time, they wondered if death might not have occurred even if there had not been transplantation. One recipient's wife felt that lack of proper self care following kidney transplantation may have been a factor in her husband's death.

Donors

Vital statistics of kidney donors were as follows: Average age was 29, eight were male and six female; 10 were white and four were Negroes (**Figure 1**); six were Protestant, three were Jewish and five were Catholic (**Figure 2**).

The education of those donating a kidney varied from college graduation to some high school, excluding the one child who was under school age (**Figure 3**). The majority of those over 18 graduated from high school, two were college graduates, and one was in the last year of medical school. Two of the donors were occupied in clerical work, two were housewives with husbands active in the educational field, three were students and six were engaged in occupations ranging from general labor to brick layer, painter and mechanic.

The income of either the donor or of his or her family, if single, ranged from $5,000 to $25,000 annually (**Figure 4**). Five had incomes of $20,000 or above. Those with higher incomes lived in the suburbs (**Table 1**). Six of the donors lived in the city, one in a small town, eight owned or were buying their homes and six were renting. The value of their homes ranged from $6,000 to $15,000. Six donors lived in homes valued at $20,000 to $45,000.

The size of the family of the eight married donors ranged from no children to seven. Three had four children, two had two children, and three had one child. Five of the single donors came from families of three or four children. In one case, a single donor was an only child. There were no incidences of divorce in the cases of the married donors, nor in the cases of the parents of single donors.

In all cases of the cadaver donors, those who signed the permit for removal of kidney and use in transplantation were either a spouse or parent. Motivation was the same in all cases (except in the two cases in which is was not possible to obtain an interview)—namely, an opportunity to save another person's life. Some of the permit signers felt that the death of their loved one was not in vain if another life was spared through use of the cadaver's kidney. In two cases the family initiated the idea of kidney donation. In all the other instances the spouse or family were approached by either a hospital staff physician or by a member of the transplant team. The latter was the case for two of the families.

Discussion

This limited study of 14 kidney transplantation patients and their cadaver donors at Detroit General Hospital yields several interesting observations. It demonstrates that a kidney transplant program in a municipal hospital is certainly feasible and may have advantages when compared to chronic hemodialysis.[4] No special problems were encountered with recipients or with families who were approached for the use of cadaver kidneys. A simple giving and receiving from one human being to another seemed to be the most important issue to recipients, to donors' families, and to all those involved in efforts to conserve and prolong life. Furthermore, the study showed that the renal transplantation program does serve the population that the hospital is charged to care for, i.e., the inner-city underprivileged.

Psychological strengths were evidenced in recipients in their very positive attitude toward kidney transplantation versus dialysis despite the risks. "Permit signers" were highly motivated and willing to donate kidneys in order to save another's life. However, since none of the donors made previous arrangements for body organs donation in case of death and only two families initiated the donation, a need for educating the public on this matter is indicated.

With utilization of funds from Medical Assistance (Title XIX) in six of the 14 recipient cases and partial utilization in three, the gap between those who can afford the expense of transplantation and those who cannot is narrowed. The option of life versus death is beginning to open for the patients suffering irreversible renal failure regardless of economic situation.

This study of some of the psychosocial and socioeconomic factors of kidney transplantation poses questions for further research in attaining a holistic approach to this form of medical care. What effects, if any, does the socioeconomic status of a kidney transplant patient have on rate of recovery and success of transplantation? What are the costs? How well are patients rehabilitated following renal transplantation? Is there a difference in attitude toward transplantation among transplant patients from different social strata? What are some of the deeper psychological effects of transplantation and do sociological factors make a difference in those effects? Hopefully, research into these and other psychological and sociological factors involved in kidney and other organ transplantation will continue in this vast new form of medical treatment.

Abstract

This study was carried out in order to more precisely characterize the patient populations receiving and donating kidneys in the cadaveric renal transplantation program at Detroit General Hospital. The latter is a municipal hospital caring for indigent underprivileged patients who live in a large urban area. During a 19 month period, 14 transplants were performed. A survey of psychosocial and socioeconomic factors pertaining to recipients and donors revealed the hospital to be serving the population that it was charged to care for. Positive attitudes toward the transplant procedure were found among the recipients and the families of the donors. Differences in race, religion, education, and income between recipients and donors indicated that widespread cooperation was obtained from the entire community in the form of kidney donations. When this experience was compared to a previously reported study of chronic hemodialysis at Detroit General Hospital, renal transplantation seemed to be a more satisfactory approach to the treatment of end stage renal disease than chronic dialysis.

References

1. Lipowski, Z. J.: Psychosocial Aspects of Disease. *Annals of Internal Medicine.* 71:6, 1969.
2. Antonovsky, A.: Teaching a Social Medicine Orientation to Medical Students. *Journal of Medical Education.* 41, 1966.
3. Greene, C. R.: Medical Care for Underprivileged Populations. *New Eng. J. Med.* 282:1187, 1970.
4. Retan, W. J., Lewis, H. Y.: Repeated Dialysis of Indigent Patients for Chronic Renal Failure. *Annals of Internal Medicine.* 64:2, 1966.
5. Alff, J.: An Outline of Prospective Contributions Made to the Renal Transplant Program, Detroit General Hospital, By Human Behavior Specialists. Unpublished student research paper, Wayne State University, School of Social Work, 1969.

Laparoscopy in a small community hospital

By E. S. Woodworth, MD
Howell

Although peritoneoscopy has been tried with varying degrees of success since the 1920's, it was used relatively infrequently and with little enthusiasm for many years due to inadequate equipment.

During the past five years, however, with the development of improved lens systems and the use of fiber-optics,[1] plus increased interest in gynecologic physiology, especially related to problems of fertility and infertility, laparoscopy has proved to be of extreme usefulness in a number of major medical centers in this country.[2] Instructional courses in the technique are now offered at centers such as the Fertility Institute at Columbia University in New York and the Cook County Graduate School of Medicine in Chicago, and recently Cohen[3] has published a monograph on this subject.

When first introduced to fiber-optic laparoscopy by Behrman[4] at the University of Michigan, the diagnostic and therapeutic potential was so impressive we determined to evaluate this technique for a small community hospital. This paper reflects our experience in a two year period beginning September 1, 1968.

The McPherson Community Health Center is an acute general hospital with bed capacity 136, annual admissions 5,159, and annual delivery rate of 619. It is situated in Howell, with a population of 5,000, and serving Livingston County area with population of 50,000. The staff consists of 25 physicians, primarily engaged in general practice (**Table 1**).

The patients in this series came primarily from the private practice of Byron Road Medical Group, P.C. (five physicians) with 30 per cent referred from other staff members and three per cent from outside the county.

Table 1

Staff Composition, McPherson Community Health Center

Field of Practice	Total
General	20
Internal Medicine	1
General Surgery	2
Anesthesiology	1
Radiology	1

Materials

The instruments were purchased from Eder Instrument Company in Chicago and include a CO_2 pneumotometer (**Fig. 1**) and a Wolff 180° laparo-

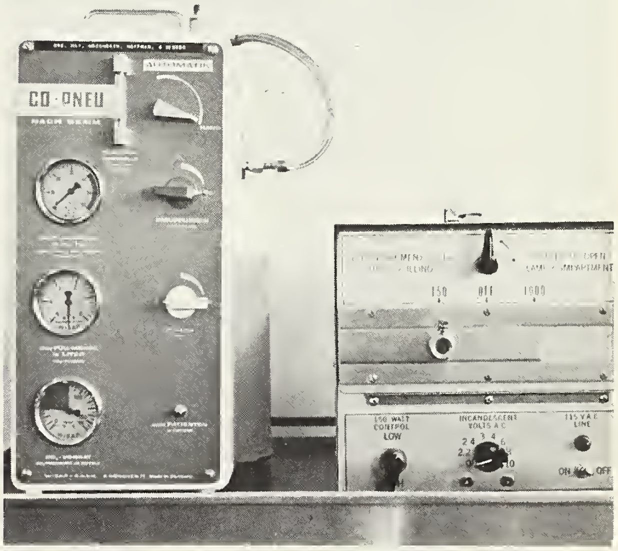


Fig. 1: 1. CO_2 pneumotometer. 2. Combination 150 watt and 100 watt light source.

Doctor Woodworth is a general practitioner in Howell.

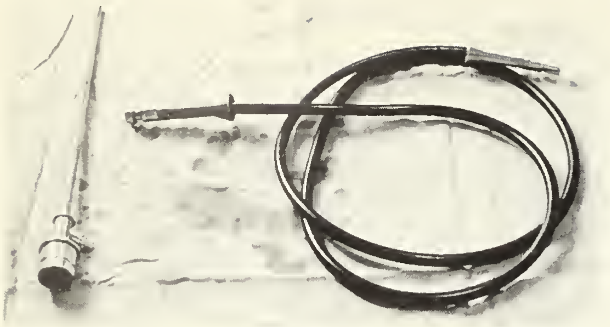


Fig. 2: 1. 180 degree Wolff laparoscope. 2. Fiberoptic cable.

scope with fiberoptic cable **(Fig. 2)**. The instruments required for manipulation of the uterus, pneumoperitoneum, abdominal puncture, and such procedures as biopsy and suction are also shown **(Fig. 3)**. Total cost initially was $1,450 and in January of 1969 the additional equipment needed for tubal sterilization **(Fig. 4)** was procured at a cost of $150. A light source of 150 watts (not shown) is very adequate for diagnostic and therapeutic work, but an additional $700 will furnish a 1,000 watt source for use in photography **(Fig. 1)**.

Method

The usual preoperative routine is carried out, but neither the abdomen nor the perineum need be shaved. All but one case was done under general anesthesia, most of which was a combination of intravenous sodium pentothal induction, nitrous oxide and oxygen inhalation, and intravenous succinylcholine drip. Halothane was used occasionally at first, but really is unnecessary unless a laparotomy is done subsequently. Patients need be intubated only if there is difficulty maintaining an adequate airway.

The patient is placed in lithotomy plus Trendelenburg position and the abdomen, perineum, and vagina are prepared with betadine or other suitable antiseptic. After draping, the bladder is catheterized and bimanual examination done to confirm the preoperative findings. The suction cup tenaculum **(Fig. 3)** is then attached so the uterus may be manipulated during laparoscopy, and tubal patency may be tested by injection with indigo carmine dye in cases of infertility.

Pneumoperitoneum is carried out with an average of 2.5 to 3.0 liters CO_2 through a puncture wound on either side of the umbilicus, using a Varres needle **(Fig. 5)**. The large perforating trocar is now introduced through a 1.5 cm. skin incision in the same area and the laparoscope introduced **(Fig. 6 & 7)**. A second puncture in either lower quadrant allows the introduction of a probe **(Fig. 8)**, biting or needle type biopsy forceps, insulated cautery probe, or the operating forceps for sterilization or lysis of adhesions. Excess carbon dioxide is removed at the end of the procedure and the incision closed with a skin clip, which may be removed the next day. Only 10 per cent of the patients require Demerol in the recovery room and rarely is any further analgesia needed. The patient is discharged the next morning unless there are other reasons for hospitalization.

Results

The 106 patients in this series were all female except two, with ages ranging from 11 to 53 and parity from 0 to 9 **(Tables 2 and 3)**. A total of 43

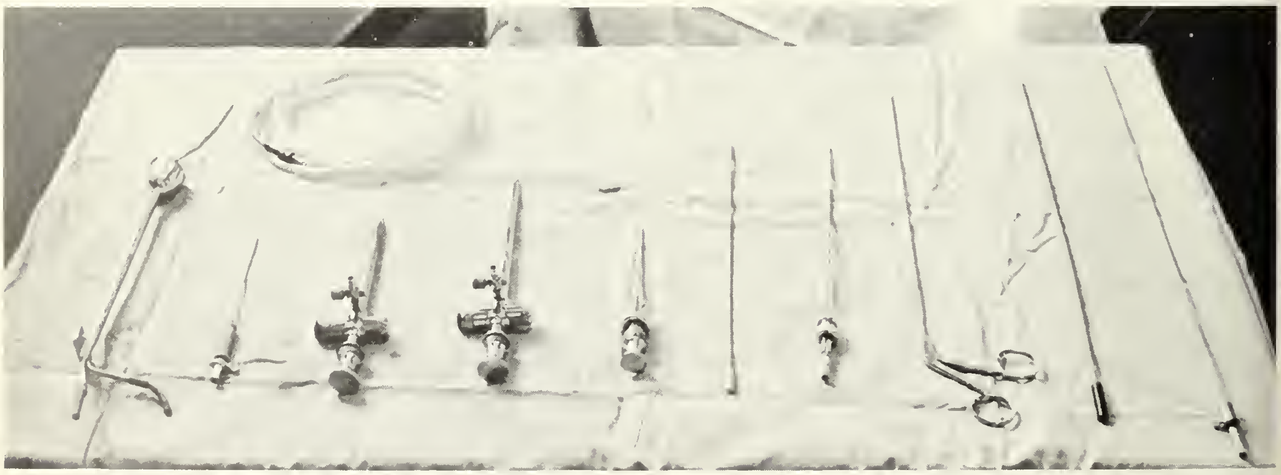


Fig. 3: (l. to r.) 1. Suction cup uterine tenaculum and probe. 2. Varres needle for use with plastic tubing. 3. 1 cm. standard trocar. 4. Extra long 1 cm. trocar for obese patients. 5. 4 mm. trocar for excessory puncture. 6. Blunt probe for retraction. 7. Needle biopsy instrument for solid organs. 8. Biting biopsy forceps. 9. Insulated blunt probe for cautery. 10. Aspiration needle.

Table 2

Age Distribution by Decades

11-20	21-30	31-40	41-50	51-60	61-70
13	39	44	6	3	1

Table 3

Distribution by Parity

Para	0	1	2	3	4	5	6	7	8	9
Total	23	5	12	20	21	7	10	3	2	1

Table 4

Concurrent procedures at time of laparoscopy:

A. Through laparoscope	
Lysis of adhesions	10
Aspiration of ovarian cyst	1
Liver biopsy	1
Omental biopsy	1
Myomectomy	1
B. Post laparoscopy	
D & C	22
Cervical conization	2
Cervicoplasty	1
Biopsy cul-de-sac mass	1
Induction of labor	1
Anterior colporrhaphy	1
Vaginal hysterectomy with A & P colporrhaphy	2
Hemorrhoidectomy	1
Varicose vein stripping	1
Laparotomy	
Appendectomy	2
Lysis of adhesions	2
Salpingo-oophorectomy	3
Hysterectomy with salpingo-oophrectomy, unilateral & bilateral	2

patients (41 per cent) were sterilized and 53 (50 per cent) had various operative procedures done concurrently ranging from D & C or laparotomy to lysis of adhesions through the laparoscope, as shown in **Table 4**.

In several patients a contemplated laparotomy was unnecessary because either no pathology was present or their primary problem was an adhesive band which was divided with the aid of the laparoscope. One patient had been diagnosed on two occasions as having a cul-de-sac tumor, presumably ovarian, which was found at laparoscopy to be merely a retroverted normal uterus. Laparotomy is often averted when differential diagnosis lies between a ruptured ovarian cyst and ectopic pregnancy. Two cases with uncertain diagnosis were found to have acute appendicitis and, of course, submitted to immediate appendectomy. A nulligravida after six years of marriage was found to have peritubal adhesions about the fimbria, and after tubal insufflation with indigo carmine, patency was re-established. The first postoperative month she became pregnant and subsequently delivered a normal term male infant.

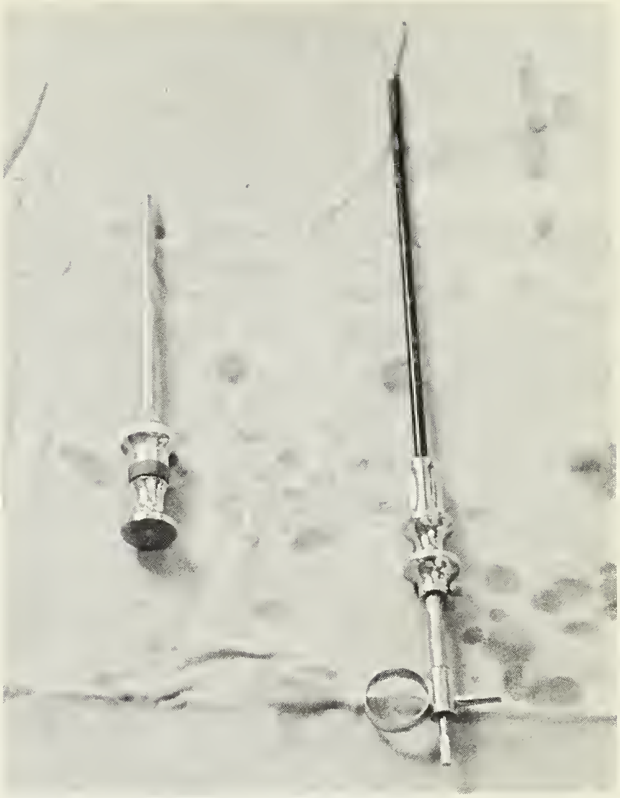


Fig. 4: Instrument for sterilization. 1. 6mm. trocar. 2. Insulated operating forceps.

One patient had massive ascites from subsequently proven ovarian carcinoma and at a second laparoscopy six months later following Cytoxan therapy, it was possible to evaluate her response to treatment through inspection and biopsies of liver and omentum. A teenage girl with a low grade febrile illness and vague symptomatology of several months duration was shown to have a subclinical hepatitis with early cirrhotic changes, through direct inspection and biopsy of the liver.

Complications and Contraindications

In our series there have been few complications.

The first was a case of peritonitis which developed in a patient found to have hemoperitoneum from severe endometriosis with recent ovarian rupture and hemorrhage. This responded to antibiotics and the patient was discharged on the fifth postoperative day. The other case involved a delayed hematoma of the right rectus sheath in a fairly obese patient, which required subsequent hospitalization for diagnosis but responded with conservative treatment after six days.

Less than 10 per cent complained of pleural type and upper abdominal pains persisting for three to five days postoperatively, and they were not suf-

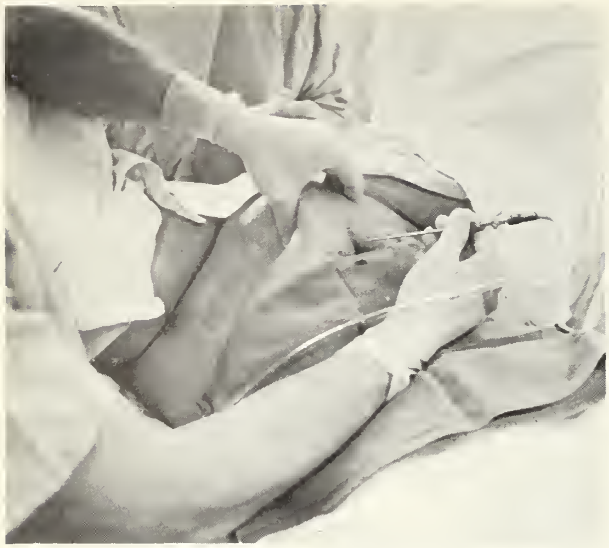


Fig. 5: Technique of pneumoperitoneum with Varres needle.

ficient to warrant further hospitalization or analgesics other than salicylates. Followup ranging from six to 30 months has failed to reveal delayed complications, or any pregnancies in those undergoing tubal interruption. There have been reports of visceral perforation and even one of the aorta, as well as two cases where gastroscopy was inadvertently performed. It is obvious that the patient with a history of previous multiple laparotomies and intra-abdominal adhesions is a poor risk for this procedure. Good anesthesia and surgical technique should reduce these major complications to nil. Generalized hemoperitoneum or peritonitis, a large hiatus hernia, and possibly a previously repaired ventral hernia are the only real absolute contraindications.

Discussion

It is difficult to transmit enthusiasm for a procedure to someone who has never seen it performed. In the vast majority of cases, however, the view of intra-abdominal anatomy and pathology, especially the female pelvis, is at least as good as, and in most cases superior to, that found at exploratory laparotomy. This is due to the perfect retraction and exposure afforded by pneumoperitoneum without packs, instruments, or the hands of an assistant to obstruct the view. The light is as intense and its position far superior to that of any surgical one, and finally the lens system of the scope is superior to the naked eye.

Diagnostically there seems to be no limit to the use of the laparoscope in the pelvis and there are several other valid uses in the abdomen as noted by the cases above. The suspected inoperable abdominal neoplasm would seem to be an excellent one, where the unfortunate patient may be spared a major operation which will only accomplish a histological diagnosis. Certainly one is much less hesitant to perform a procedure with such low morbidity in cases of vague symptomatology and uncertain diagnoses, and the establishment of lack of disease alone has often been found to bring an end to the patient's fears, and hence her complaints.

The therapeutic use, as can be seen, lies primarily in the field of sterilization. With the growing

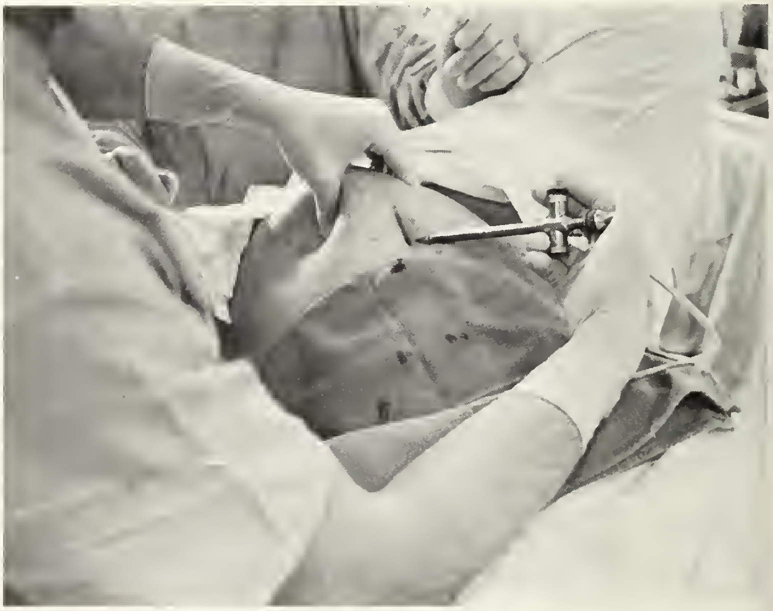


Fig. 6: Abdominal puncture with large trocar.

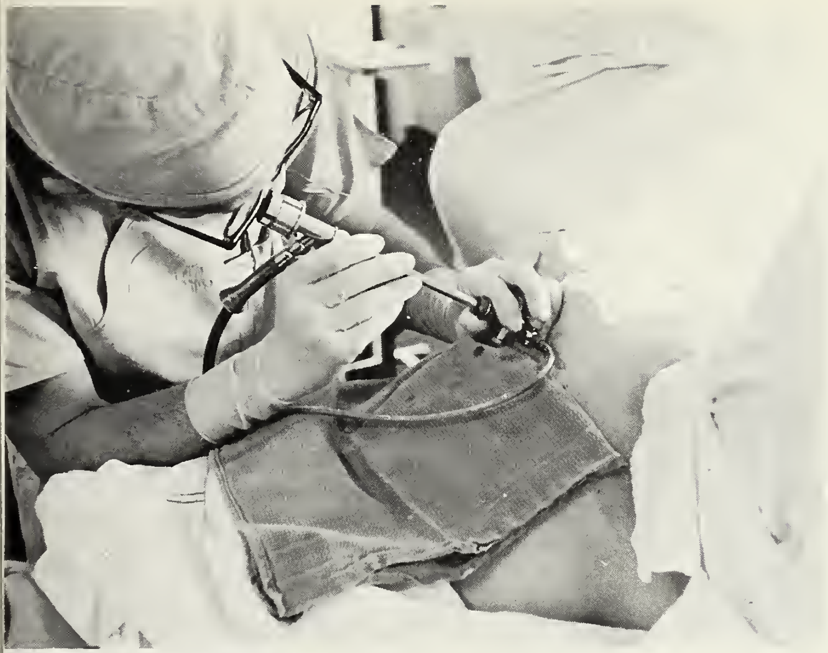


Fig. 7: Use of laparoscope.

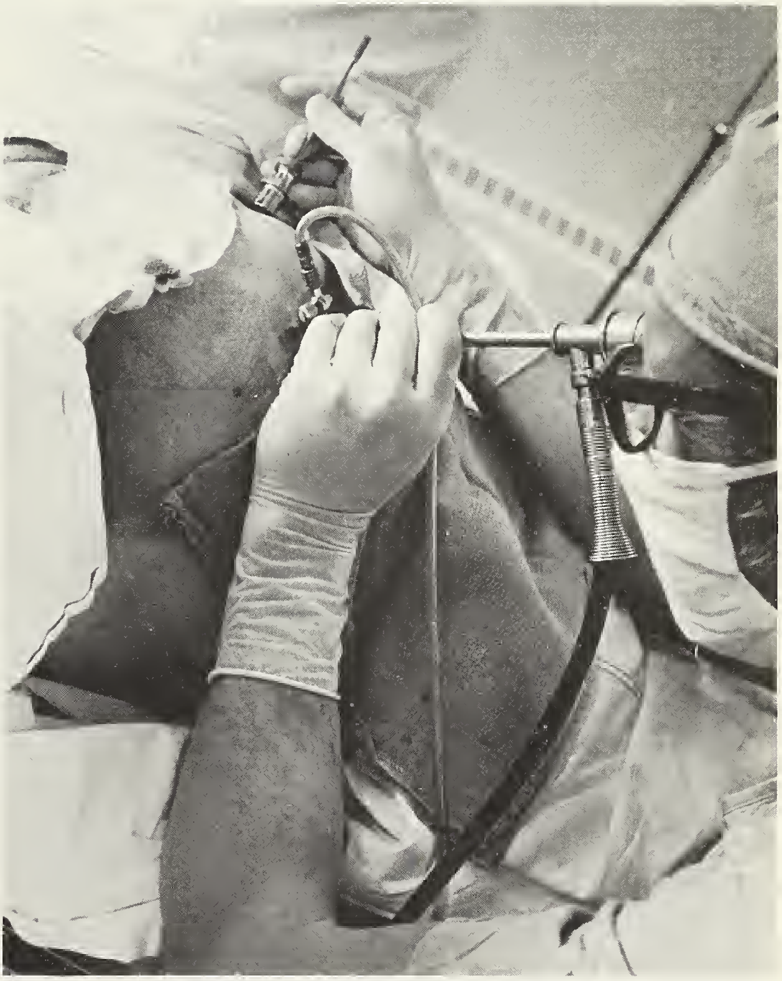


Fig. 8: Use of blunt probe through second puncture wound as aid in retraction.

problem of overpopulation, there is probably no more pressing socio-economic area of practice today. This procedure is extremely effective, simple and safe. These patients seem to suffer the least morbidity of all, and indeed often find it hard to believe that one has really done the procedure outlined to them! A word of caution, however, at this point. Due to the extreme vascularity of the adnexal tissues in the immediate postpartum state, sterilizations at this time should not be attempted through the laparoscope, as there is little to be gained by the procedure over the older methods and the risk of hemorrhage is real.

The other main therapeutic use lies in division of significant adhesive bands, and here laparoscopy is certainly superior to a major laparotomy, which in itself carries a high risk of producing further adhesions.

Summary

A survey of the cost, use, and effectiveness of laparoscopy in a small community hospital has been presented, and the following conclusions are reached:

I. Fiber-optic laparoscopy has proved and continues to prove itself an effective and important diagnostic and therapeutic tool.

II. Formal postgraduate courses and more recently a text are available in the use of the laparoscope.

III. The cost and operation of such equipment need not relegate its use to large institutions or medical centers, for indeed laparoscopy has a role to play and should be made available in smaller community hospitals.

Addendum:

Since the above article was written another useful indication has arisen for the laparoscope. We now have had three cases of retrieval of an intrauterine device (Lippes' loop) which had perforated the uterus and was lying in the peritoneal cavity. These were retrieved by means of the operating forceps used for the tubal sterilization and the first two cases were accomplished shortly after the perforation was discovered. The third case was one where the interabdominal penetration was not diagnosed and subsequently a normal uterine pregnancy followed. The device was not retrieved during the postpartum state because of lack of symptomatology, but six months later the patient was admitted with an acute abdomen and was scheduled for a laparotomy the following morning. This was averted by laparoscopy and removal of the IUD following which she was discharged the next day and has made a completely uneventful recovery.

References

1. Balin, H., et al: Recent Advances in Pelvic Endoscopy. *Obstet. and Gynec.* 27:30-43, 1966.
2. Harris, J. W., et al: The Yield From Pelvic Endoscopy. *JAMA* 215: 1117-1121, 1971.
3. Cohen, M. R., Laparoscopy, Culdoscopy, and Gynecography, W. B. Sanders Co. 1970.
4. Behrman, S. J., Director of the Center for Research in Reproductive Biology, University of Michigan Medical Center.

Cholangiocarcinoma

associated with Thorium Dioxide (thorotrast):

Report of a Case

By Alexander N. Rota, MD, MSc, (Path)
Howard K. Weindling, MD
Paul G. Goodman, MD
Detroit

Technical Assistance:

Microautoradiography was performed in the laboratory of Jon Kobara, Ph.D., by Mrs. Betty Chapman, Department of Chemistry, University of Detroit.

Patients who have received thorium dioxide in suspension (Thorotrast) are of interest because they are an important source of clinical material for evaluation of the late effects of continuous low level radiation, the most important of which is the development of neoplasms. Since there is a significant number of thorium dioxide (Thorotrast) recipients on record in Michigan available for follow-up studies, it was considered that the following interesting case report would serve as a reminder for Michigan physicians of a not too common but well established condition.

The case report describes a middle-aged patient with acquired idiopathic hemolytic anemia who, 12 years after an intravenous injection of thorium dioxide, developed cirrhosis and cholangiocarcinoma.

Case Report

The patient, a 51 year old fat white man, was first seen in 1955 when a clinical diagnosis of idiopathic acquired hemolytic anemia was substantiated by detailed blood studies. The spleen was enlarged on palpation and on roentgenographic examination. Initially, the anemia responded favorably but only temporarily to steroid therapy. The spleen removed in September, 1955, weighed 365 grams and except for its size, was grossly unremarkable. Microscopically, the normal architecture of the spleen was intact with dilated blood filled sinusoids lined by swollen endothelial cells. Iron pigment was found in moderate amounts in the sinusoidal endothelial cells.

Hemolytic crises recurred despite treatment. In attempt to find an accessory spleen, 19 grams of thorium dioxide were given intravenously as Thorotrast over a 3 day period in October, 1955. An accessory spleen was not found, and the patient was continued on the usual low doses of cortisone.

Five years later in May, 1961, the patient was admitted to hospital for treatment of a steroid induced peptic ulcer. On routine radiologic examination of the gastrointestinal tract, the liver showed a definite mottled, diffuse, increased density dispersed throughout the parenchyma. In addition, multiple large calcified lymph nodes were present in the epigastric paravertebral regions. The changes in the liver suggested hemochromatosis or Thorotrast disposition.

Signs and symptoms of obstructive jaundice of four weeks duration accompanied by a weight loss of 40 pounds led to the patient's last admission to hospital in March, 1967. There was no puritis, epigastric pain, and no history of alcoholism or hepatitis. Spider nevi, gynecomastia or testicular atrophy were not present. The abdomen was distended, ascites was questionable and no abdominal masses were palpable. Liver scan showed lack of normal uptake. Roentgenographically, the densities of the liver and abdominal lymph nodes were more marked than those noted in 1961 (**Figure 1**). A needle biopsy of the liver was unsuccessful. Blood tests showed continuing hemolysis. Liver function

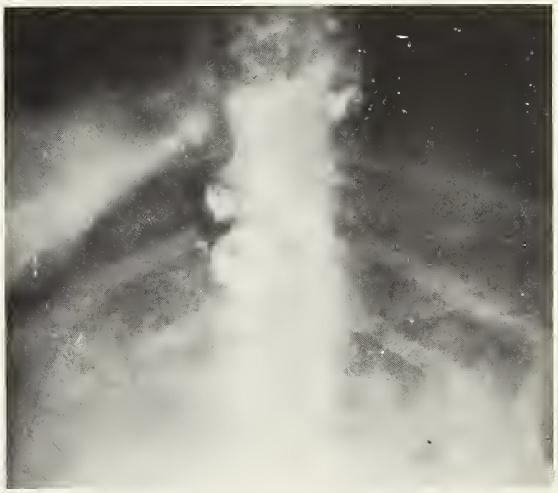


Fig. 1. Radiograph of abdomen showing thorium dioxide (Thorotrast) in liver and paravertebral lymphnodes.

The authors are with the division of pathology and laboratories, Sinai Hospital of Detroit.

tests indicated biliary obstruction for the first time. Liver failure developed, upper gastrointestinal bleeding occurred and the patient died in coma, 50 days after admission. Twenty-seven units of blood had been administered on previous admissions and 32 units of blood had been given during his last admission.

Autopsy Findings

The body was that of a fat white man with jaundice and marked pretibial edema. There were dense fibrous adhesions obliterating portions of the left pleural space, the pericardial sac, and the peritoneal cavity. The abdominal cavity contained 4,400 milliliters of clear yellow liquid.

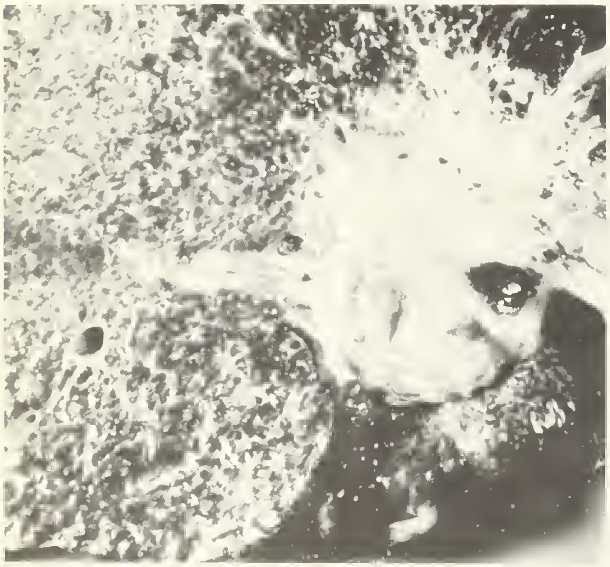


Fig. 2. Cut surface liver showing cirrhosis and cholangiocarcinoma at the porta hepatis.

The liver weighed 1,160 grams. It was hard, nodular and bile stained. The liver cut with a gritty sensation and the cut surface had a distinct green-yellow hue. The nodules were relatively uniform in size, each approximately 0.2 centimeters in diameter. In the area of the porta hepatis the liver was fibrous, firm and bright yellow. This area was slightly depressed with punctate greyish stippling. Tissue from this area radiated in all directions, appearing to infiltrate the liver (**Figure 2**).

The abdominal lymph nodes were discrete, small, soft with black areas of pigmentation.

Shallow mucosal ulcers were present at the lower end of the esophagus. The intestinal tract contained black fecal material.

All other organs were within normal limits except for the congestion of the lungs and for bile staining of the kidneys. Permission to examine the cranium was not given.

Microscopic Findings

The nodules of liver parenchyma were separated by coarse bands of fibrous connective tissue (**Figure 3**). Many of the nodules were composed of radiating columns of large parenchymal cells usually without central veins. There was marked bile stasis with the formation of bile lakes and the proliferation of bile ducts especially in the fibrotic areas. Aggregates of crystalline brown pigment and scattered lymphocytes were present within the fibrous bands. The crystalline pigment proved to be particles of thorium dioxide and fine granules of iron. Iron pigment was also present elsewhere in liver cells and Kupffer cells. Thorium dioxide was present only in Kupffer cells. The mass in the

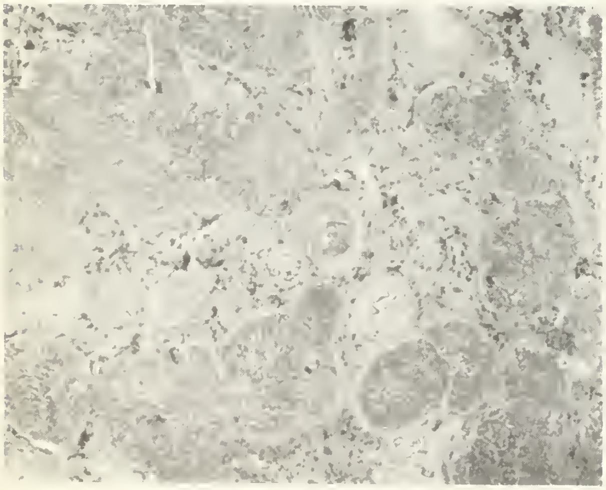


Fig. 3. Cirrhosis and aggregates of thorium dioxide (Thorotrast) in fibrotic areas. X12.5

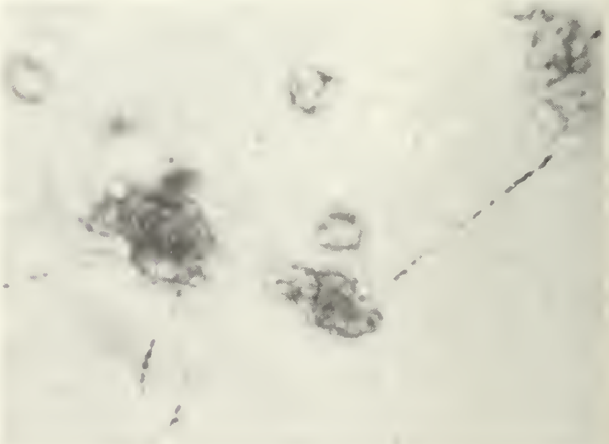


Fig. 4. Autoradiograph of liver indicating aggregates of thorium dioxide (Thorotrast) and alpha tracks. X970

porta hepatis had an infiltrating pattern of a moderately well differentiated cholangiocarcinoma. The tumor frequently formed mucin containing glandular units, (**Figures 5, 6**). In the fibrous tissue adjacent to the cholangiocarcinoma were large aggregates of thorium dioxide.

Autoradiographs of the liver sections showed alpha tracks in the area containing aggregates of pigment after incubation for 28 and 66 days (**Figure 4**).

Thorium dioxide was found in all sections of the abdominal lymph nodes, adrenal medulla and bone marrow.

Other findings included acute passive congestion of the lungs, bile pigment in renal tubules and tubular epithelium and esophageal varices.

Death was ascribed to cirrhosis, liver failure, and hemorrhage from esophageal varices. No cause for the hemolytic anemia was determined. Chol-

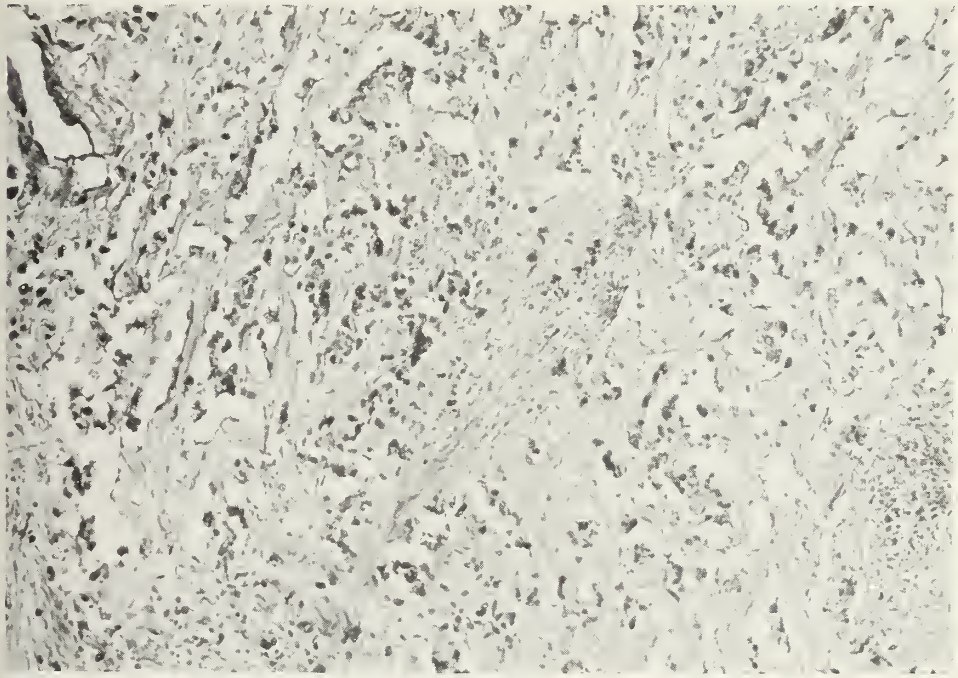


Fig. 5. Infiltrating pattern of a moderately well differentiated cholangiocarcinoma. X225

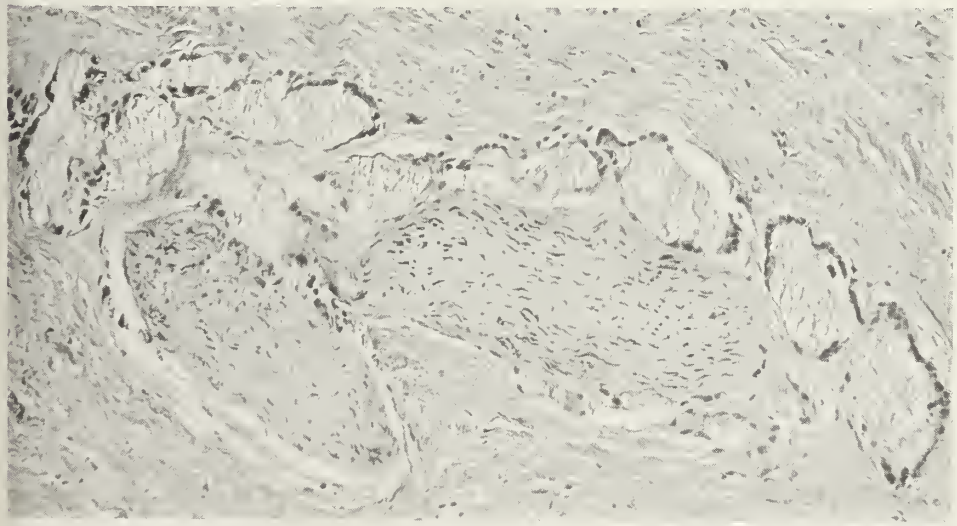


Fig. 6. Perineural infiltration of cholangiocarcinoma showing mucin production. X180

angiocarcinoma in this case was an unsuspected finding.

Discussion

Thorium is a radioactive element with a biologic half life of 400 years. Its radioactivity is expressed as 90% alpha, 9% beta and 1% gamma rays. Thorium dioxide when injected into the blood stream is removed by the phagocytic cells of the reticuloendothelial system – 20% in spleen, 70% in liver and 10% in bone marrow and lymph nodes. Once injected, the thorium material is excreted at a negligible rate and most of the material remains in the body for life. The deposits tend to form aggregates of increasing size. Radiation from thorium particle aggregates has a high specific ionization and since it continues year after year, the total amount of radiation received by adjacent tissue is very high. In tissue sections thorium dioxide appears as characteristic purple particles with the hematoxylin and eosin stain and as purple-black particles with hemalum, phloxin and saffron stain. The thorium dioxide particles are not birefringent with polarized light. Aggregates of thorium dioxide produce alpha tracks by autoradiography.

Thorium dioxide has been used as a contrast medium for radiography since 1928. Despite knowledge of its oncogenic properties, reported in 1932, it was still in frequent use well into the late 1950's especially for angiography.[2] Thorium dioxide commercially known as Thorotrast, is a colloidal suspension of 25% thorium dioxide having particles size ranging from 3 to 10 mu.

The effects of thorium dioxide in tissues include the development of local tumors at the site of injection, fibrosis of liver, tumors of the liver, tumors of other organs, leukemia and chromosomal aberrations.[2,4]

References to hepatic fibrosis in man caused by Thorotrast mention almost exclusively portal space fibrosis with practically no pseudolobular neoformation in the whole organ. Horta et al[1] do not consider the "Thorotrast liver" in most cases as a true cirrhosis. They do suggest that the "Thorotrast liver" could represent a post necrotic cirrhosis in which the necrosis was due to Thorotrast.

The experimental production of neoplasms by Thorotrast was documented in animals in 1934. MacMahon,[6] in 1947, reported the first case of a human neoplasm, an endothelial sarcoma of liver, due to Thorotrast. Since then, over 100 cases of malignant liver tumors have been reported[3] in patients who have received Thorotrast. About one-half of these cases have been hemangio-endotheliomas, an almost Thorotrast specific tumor, while the remaining half have been equally divided between hepatomas and cholangiocarcinomas. These tumors develop after latent periods of 12.6 years ±4 years for carcinoma. It is still not certain whether neoplasms induced by thorium dioxide arise due to its radioactivity or because of physical or chemical irritation or from combinations of these factors.

The increased incidence of hepatic malignancy in cirrhosis is well recognized. Post necrotic and post hepatitic cirrhosis related to cancer of the liver, predominate. Some 75% of cases of hepatoma appear in association with pre-existing cirrhosis. The coincidence of cirrhosis with cholangiocarcinoma is generally given as 50%. Hepatic carcinomas associated with deposits of thorium dioxide develop in relation to hepatic scarring.

Our case followed the usual pattern of deposition of thorium dioxide aggregates, fibrosis of the liver and the development of a carcinoma of liver after a latent period.[5,7] Iron deposition in the liver was excessive and was related to the patient's primary disease of an acquired hemolytic anemia and to multiple blood transfusions. The role of hemosiderosis played in the development of fibrosis in this case is speculative. In most of the areas examined, there was characteristic portal fibrosis with biliary duct proliferation. All fibrotic areas were related to deposits of thorium dioxide. Our case, did not add further information about factors in the development of hepatic carcinoma. Late changes due to low level alpha radiation in hemopoietic tissues, the skeleton and of other sites were not evident.

Based on current rosters maintained by the Division of Radiological Health of the United States Public Health Service[7] over 1,000 patients have received injections of Thorotrast. Of these patients, over 425 cases are listed at the University of Michigan available for follow-up studies. It is probable that patients with Thorotrast induced hepatic tumors will continue to appear in the next few years, particularly in Michigan.

References

1. Horta, J. DaSilva, Abbatt, J. D., Motta, L. C., Roriz, M.L.: Malignancy and other late effects following administration of Thorotrast. *Lancet* 2:201-205, 1965.
2. Janower, M. L., Sidel, V. W., Baker, W. H., Fitzpatrick, D. E. P., Guarino, F. I.: Late clinical and laboratory manifestations of Thorotrast. Administration in cerebral arteriography. *New Eng. J. Med.* 279:186-189, 1968.
3. Kuisk, H., Sanchez, J. S., Mizund, N. S.: Colloidal thorium dioxide (Thorotrast) in radiology with emphasis on hepatic cancerogenesis. *Am. J. Roentgenol. & Rad. Therapy.* 99:463-475, 1967.

4. Looney, W. B.: An investigation of the late clinical findings following Thorotrast (thorium dioxide) administration. *Am. J. Roentgenol., Rad. Therapy & Nuclear Med.* 83: 163-185, 1960.
5. MacKay, J. S. and Ross, R. C.: Hepatoma induced by thorium dioxide (Thorotrast). *Can. Med. Ass. J.* 94:1298-1303, 1966.
6. MacMahon, H. E., Murphy, A. S., Bates, M. I.: Endothelial cell sarcoma of liver following Thorotrast injections. *Am. J. Path.* 23:585-611, 1947.
7. Swarm, R. L.: Distribution and Late Effects of Thorium Dioxide. *Annals of the New York Academy of Sciences.* 145:523-858, 1967.

Elevations Of the Serum Alkaline Phosphatase After Infusions of Albumin

By W. R. Clark, MD
Baraga

Physicians familiar with the clinical pathologic literature may know that elevations of the serum alkaline phosphatase have been reported after intravenous infusions of human albumin obtained from placental sources. [1,2] A recent article puts this possibility into clinical perspective and surveys some commercial suppliers of albumin as to the origin of their product.[3] The purpose of this paper is to present a case emphasizing the benign nature of this enzymatic elevation and to make clinicians aware that some of the albumin supplied by the Michigan State Department of Public Health is prepared from placental extracts.[4]

Case Presentation

J. P., a 77 year old male came to his operation after a four week illness characterized by abdominal pain, vomiting, anorexia, and fever. There was a history of "ulcer" disease and intolerance to fried foods. There was no jaundice or adenopathy. The abdomen was obese without palpable masses. X-rays were all normal except for the failure of the gallbladder to concentrate dye on an oral cholecystogram.

Laboratory studies included the hematocrit 42%, white blood cell count 12,500, total bilirubin 2.6 mgm%, total protein 5.6 gm%, albumin 3.0 gm%, amylase 644 somogyi units/100 ml, and alkaline phosphatase 8.9 King Armstrong units/100 ml, (normal 3.0-11.3 units). Prior to operation the patient had been maintained on intravenous fluids and antibiotics. The operation consisted of removal of a gangrenous gallbladder and of several common duct stones. A normal operative cholangiogram was obtained. During a nine day period the patient was given eight 12.5 gm units of normal serum albumin. All of these were obtained from the Michigan State Department of Public Health, but only the last four came from a lot prepared from placentas. One day after the last albumin infusion the serum alkaline phosphatase level peaked at 106 King Armstrong units (**Figure 1**). Two weeks later the phosphatase concentration had returned to normal levels. The post-operative course was benign though protracted. The patient was discharged after a normal cholangiogram and removal of his "T" tube.

The alkaline phosphatase determination done on post-operative day four gave a high value clearly inconsistent with the patient's clinical course as well as his other liver function tests. Had the figure

---

Doctor Clark is with the Moyer Clinic in Baraga.

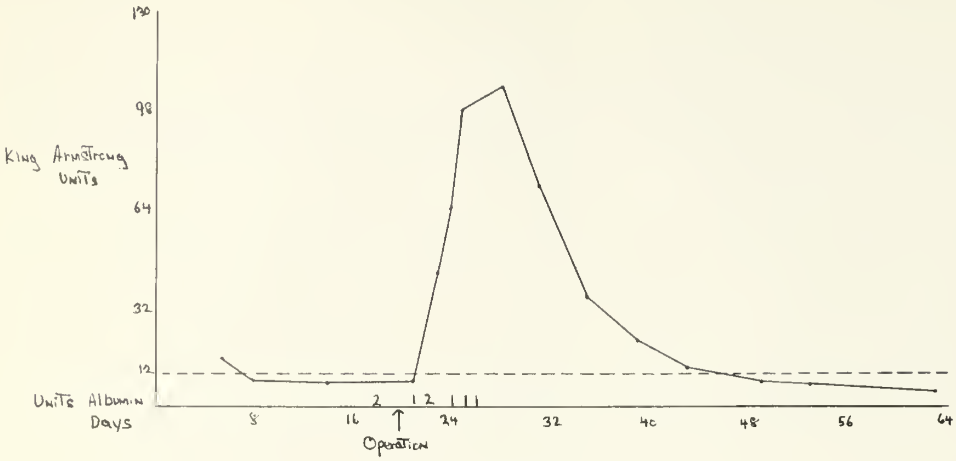


Figure I

been a more credible one it might have led to diagnostic error and inappropriate therapeutic measures in this patient with biliary tract disease. Such could have been the case had the enzyme determination been done earlier or later when the serum concentration was rising or falling. The concentration of alkaline phosphatase in the albumin in question was 4,390 King Armstrong units/100 ml. Communication with the Michigan State Department of Public Health confirmed the fact that four units of albumin given to the patient were of placental origin.[4] This was contrary to the locally held assumption that all albumin from this supplier was prepared from plasma.

The patient did well and showed no ill effects from the alkaline phosphatase elevation. This enzyme has been shown to be metabolically inert and to disappear from the circulation with a half-life of about seven days.[5] The rate of disappearance is independent of the amount given and the serum concentration. The rate is unchanged by the existence of biliary tract disease and the presence of high endogenous alkaline phosphatase levels.[6] No heat stability, immunologic, or electrophoretic studies were done to further identify the enzyme and show it to be different from alkaline phosphatase of hepatic, osseous, or intestinal origin. Lacking information from the supplier as to the source of the albumin or an aliquot of albumin to test for alkaline phosphatase, such tests would need to be done to determine the cause of extraordinarily high serum levels.

With the recent favorable press given to transvenous hyperalimentation and the availability of practical delivery systems, the administration of albumin to seriously ill patients may be expected to increase. Artifactual elevation of the alkaline phosphatase is a consequence of infusing albumin prepared from placentas. This is of no clinical significance except as it might cause diagnostic confusion. Diagnostic dilemmas of this sort might be fewer if the suppliers clearly identified the bottles containing albumin of placental origin.

A patient in whom the serum alkaline phosphatase rose to abnormal levels after infusion of albumin of placental origin is presented. The albumin was supplied by the Michigan State Department of Public Health. The absence of harmful effects is stressed as is the possibility of diagnostic confusion arising as a result of this aberrant laboratory determination.

References

1. Bark C. J., Artifactual Elevations of Serum Alkaline Phosphatase following Albumin Infusions. *Am. J. Clin.* Path. 52:466-467, October 1969
2. Sgouris J. R., Holwenda J. J., Nelson L. T., Eldering G. E., Abstracts Amer. Assoc. Blood Banks, page 125, October 1967
3. Mackie J. A., Arvan D. A., Mullen J. L., Rawnsley H. M., Elevated Serum Alkaline Phosphatase Levels after the Administration of Certain Preparations of Human Albumin. *Amer. J. Surg.* 121:57-61, January 1971
4. Personal Communication
5. Posen S., Alkaline Phosphatase. *Ann. Int. Med.* 67:183-203, July 1967
6. Clubb J. S., Neale F. C., Posen S., The Behavior of Infused Human Placental Alkaline Phosphatase in Human Subjects. *J. Lab. Clin. Med.* 66:493-507, September 1965

Renal lesions in streptococcal pyoderma

By Gerald S. Light, MD
William W. Nicholls, MD
Flint

Abstract

The present anterospective study was designed to determine the incidence of glomerulonephritis following streptococcal skin infection. Follow-up evaluation of 158 cases of pyoderma disclosed no cases of acute glomerulonephritis. The present data indicate that in endemic situations the incidence of acute glomerulonephritis may be exceedingly low.

Skin infection is one of the two common clinical forms of streptococcal disease responsible for acute glomerulonephritis. The prevention of glomerulonephritis and the reduction of spread of the organisms to other individuals are therapeutic goals that should be applied to the management of streptococcal skin infection.[1] However, the incidence of acute glomerulonephritis as a complication of streptococcal pyoderma is unknown.

Retrospective studies of acute glomerulonephritis have implicated an antecedent streptococcal pyoderma in seven per cent[2] to 68 per cent[3] of the observed cases. However, most of these studies do not include adequate bacteriologic and serologic data. The high incidence of acute glomerulonephritis may reflect the prevalence of streptococcal skin infections in certain select geographical areas. Moreover, a positive history of skin lesions in children may be incidental.

Conversely, prospective studies on streptococcal pyoderma have shown an incidence of acute glomerulonephritis in 3.4 per cent[4] to 4.7 per cent[5] of the reported cases. However, some of these studies were done in areas where acute glomerulonephritis was epidemic. Although only a small percentage of patients had throat cultures positive for streptococci, it is conceivable that some cases of acute glomerulonephritis followed a streptococcal pharyngitis. A particularly virulent streptococcus may have been prevalent in the area or the population may have been unusually susceptible.

The obvious conflict in data prompted the present study.

Method

The study consisted of an anterospective evaluation of 158 cases of pyoderma treated over a three-year period at a pediatric out-patient clinic, serving a mid-Western, urban, lower socioeconomic population.

Approximately 50% of the total patients were black and 70% were males. The mean age was 8.3 years and the mean duration of skin lesions prior to treatment was 7.2 days. Micro-organisms were isolated from initial skin cultures by standard bacteriologic techniques. Group A streptococci were identified by bacitracin disc sensitivity. All patients were treated with topical cleansing and appropriate systemic antibiotics. Follow-up examination of all cases after the skin lesions had cleared consisted of a routine physical examination and a urinalysis.

Doctor Nicholls is chief of the Department of Pediatric Medicine at the Mott Children's Health Center in Flint, and also is director of the Department of Pediatrics at Hurley Hospital, Flint. Doctor Light is on the staff of the Department of Pediatric Medicine at the Mott Children's Health Center and is also teaching associate at Hurley Hospital.

Results

Of the 158 initial skin cultures, a pure growth of Group A beta streptococci was obtained in 20 (12.7 per cent), a pure growth of staphylococcus aureus in 17 (11.4. per cent and staphylococcus aureus and Group A beta streptococci in 121 (75.9 per cent). Follow-up examination after the skin lesions had cleared revealed no clinical evidence of acute glomerulonephritis and all urinalyses were normal.

Discussion

The incidence of acute glomerulonephritis following pyoderma is related to the prevalence of Group A streptococci and to the nephrogenicity of the strain. M type 2 and M type 49 streptococci have accounted for most cases of nephritis and these sterotypes have been rarely encountered outside the "nephritis families."[1,6] However, the true incidence of M type 2 and M type 49 streptococci causing impetiginous lesions is unknown because precipitin tests for M-antigen are not feasible in most laboratories.

The reported incidence of acute glomerulonephritis associated with streptococcal skin infections may be erroneously high because of such variables as geographic location, incorrect diagnosis, organism virulence, and population susceptibility. The present data suggest that in endemic situations, the true incidence of acute glomerulonephritis following a streptococcal skin infection may be less than one per cent.

Dillon[1] has recently reported that most patients with acute glomerulonephritis following skin infections have had the renal lesion when first seen. Some patients developed acute glomerulonephritis after initiation of treatment with topical bacitracin or a single injection of penicillin in oil. However, acute glomerulonephritis did not occur in any patients infected with nephritogenic streptococci who were treated with intramuscular benzathine penicillin.

In clinical practice the question of whether systemic antibiotic treatment should be used for streptococcal pyoderma cannot be answered with precise data. It has been demonstrated that systemic antibiotic therapy is more effective than topical treatment in rapid clearing of the lesions, reducing infectivity, and eliminating the organism. For these reasons it is logical to use systemic antibiotics for the treatment of streptococcal pyoderma, even though prevention of renal lesions cannot be assured on the basis of available data.

References

1. Dillon, H. D., Jr., The Treatment of Streptococcal Skin Infections, *J. Pediat.*, 76:676, 1970.
2. Rapoport, M., Some thoughts on management of acute hemorrhagic nephritis in children. *Penn. Med. Journ.*, 50:1342, 1946-47.
3. Blumberg, R. W., and Feldman, D. B., Observations on acute glomerulonephritis associated with impetigo, *J. Pediat.*, 60:677, 1962.
4. Anthony, B. F., Perlman, L. V., and Wannamaker, L. W., Skin infections and acute nephritis in American Indian Children, *Ped.*, 39:263, 1967.
5. Markowitz, M., Burton, H. D., Kuttner, A. G. and Cluff, L. E., The bacteriologic findings, streptococcal immune response, and renal complications in children with impetigo, *Ped.*, 35: 393, 1965.
6. Dillon, H. C., Jr., Maxted, W. R., and Reeves, M. S., Acute glomerulonephritis following skin infection due to streptococci of M type 2, *Lancet*, 1:543, 1968.

Atrial fibrillation and hypokalemia

By Sonia A. Ramirez, MD
Michael C. Kozonis, MD
Donald C. Overy, MD
Pontiac, Michigan

It has been observed and reported in the literature that cardiac arrhythmias occur with low serum potassium level in association with, as well as independent of digitalis toxicity. Whereas ectopic beats, supraventricular and ventricular arrhythmias are generally successfully treated with potassium therapy, atrial fibrillation and atrial flutter have been found to be notoriously resistant to the therapy.

Few cases have been reported in the literature of atrial fibrillation corrected with potassium. Bettinger, et. al,[9] have reported two cases of atrial fibrillation treated with potassium. Samson,[9] who pioneered the treatment of arrhythmias with potassium, encountered two instances of atrial fibrillation responding to the therapy. Sarma, et. al,[9] have reported a case of atrial fibrillation in chronic diarrhea corrected with oral potassium. Dr. Paul Ebert of Duke University, reported at the recent American Heart Association meeting at Dallas, Texas, the direct relationship of atrial arrhythmias in post-operative cardiac patients with reduced potassium levels.

Case Report

D.S., a 77-year-old white female, was admitted to the surgical service at St. Joseph Mercy Hospital on Feb. 7, 1970, because of increasing constipation, fullness and soreness in the left upper quadrant of the abdomen of one week duration. The past history was negative for any serious illness or evidence of heart disease. The family history was not significant.

Physical examination on admission showed a conscious, cooperative, afebrile patient in no sign of distress with a BP of 130/70, a pulse of 88/min. There was no neck vein distention or abnormal venous pulsations. The thyroid was not palpable. The heart was not enlarged, and there was no evidence of a murmur or of a gallop rhythm. The lungs were clear to percussion and auscultation. There was a palpable mass in the left upper quadrant of the abdomen which was about 4-5 inches in diameter, soft, with smooth borders, slightly tender and movable but not with respiration. The rest of the physical examination was negative.

The admitting diagnosis was carcinoma of the colon. The clinical work-up performed over the next few days was as follows: Hgb. 11.9 gms.%, Hct. 38.3%, RBC 4.15 ml/cmm., WBC 7,300/cmm, polys 76%, lymphos 15%, monos 8%, eos. 1%. VDRL negative. Urinalysis negative. SMA 12 normal. Na 140 meq., K 3.2 meq., Cl 105 meq., CO_2 24 meq. The chest X-ray showed multiple fractures on the left side but a normal heart size. The Ba enema revealed a large neoplastic mass in the distal transverse colon. The upper gastrointestinal series demonstrated a small hiatus hernia and an infiltration of the greater curvature of the stomach by the colonic neoplasm also involving the small bowel. The electrocardiogram (Fig. 1) was normal.

Hospital Course

The patient underwent transverse colectomy, splenectomy and partial gastrectomy on the fifth

---

Doctor Ramirez is a fellow in cardiology, St. Joseph Mercy Hospital, and Wayne County General Hospital. Doctor Kozonis is chief of cardiology, and Doctor Overy is director of cardiovascular education, St. Joseph Mercy Hospital, Pontiac.

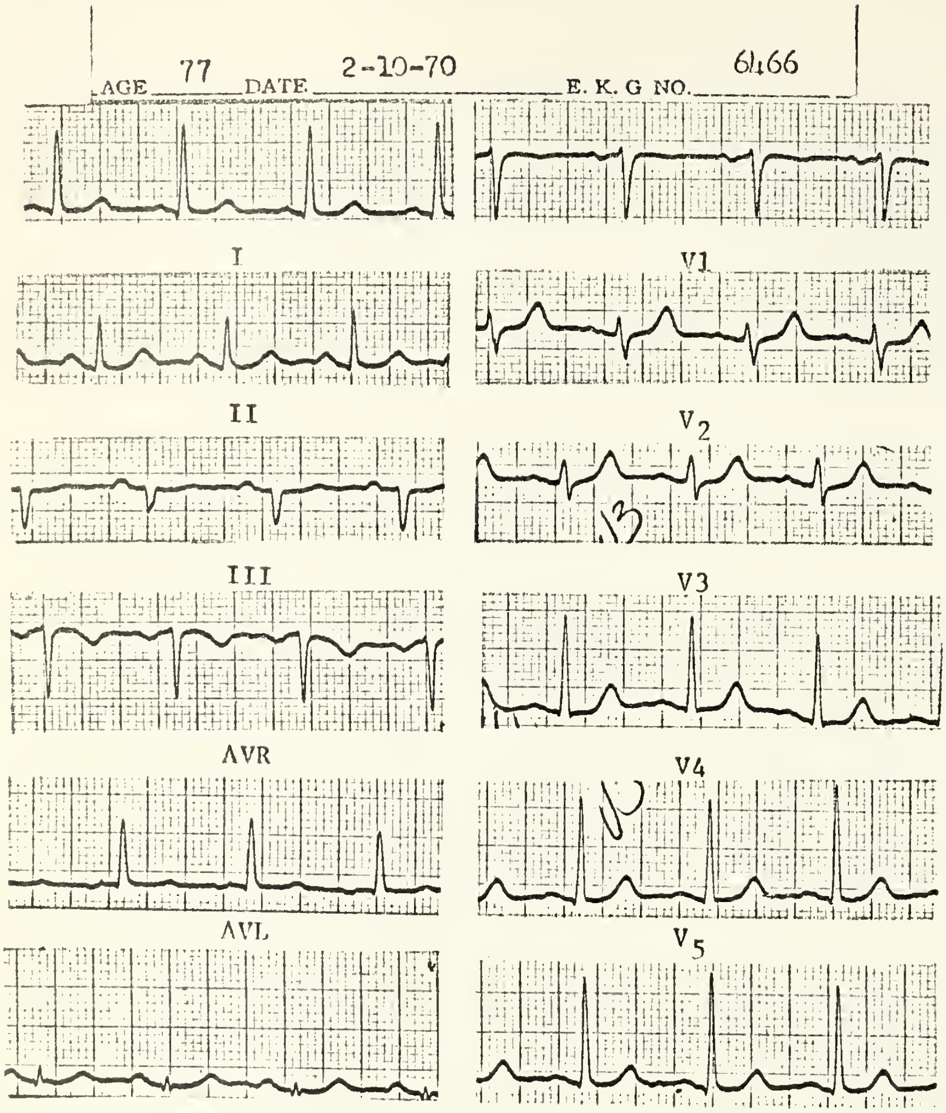


Fig. 1. Normal sinus rhythm. Serum K level—3.2 meq.

hospital day. The pathology report was adenocarcinoma of the transverse colon, partially differentiated, Gr. II, with penetration through the serosa but no evidenve of lymph node metastasis, sessile polyp, marked atypia from the distal margin of the neoplasm. Normal spleen.

The immediate post-operative hospital course was not remarkable; however, on the third post-operative day, she began to have symptoms of hypokalemia which consisted of muscle weakness, nausea, vomiting and hypoactive bowel sounds. The pulse was rapid and irregular and the electrocardiogram showed atrial fibrillation with a rapid ventricular response. (**Fig. 2**).

All this time she had been receiving an intravenous infusion of 5% dextrose in water. The serum electrolyte studies showed a potassium of 2.1 meq., Na 140 meq., Cl 101 meq. and CO_2 25 meq. There was no evidence of heart failure. Central venous pressure monitoring was initiated, continuous intravenous infusions consisting of 5% dextrose in water alternating with Normosol R that contained 40 meq. of KCl in each bottle was administered. Close follow-up of the electrolytes showed a gradual rise of the serum potassium level as follows: 2/16—2.8 meq., 2/17—3.2 meq., 2/21—3.4 meq.

She improved remarkably, and the infusions were discontinued. She was placed on oral potassium therapy consisting of K-lyte 1 tab. twice daily in water. Her electrocardiogram showed spontaneous conversion to normal sinus rhythm (**Fig. 3**) with serum potassium at 3.5 meq./liter. She finally was discharged home on March 7, 1970, asymptomatic with normal sinus rhythm.

Discussion

This patient, after undergoing extensive bowel resection, developed an atrial arrhythmia when the serum potassium dropped abruptly to 2.1 meq.

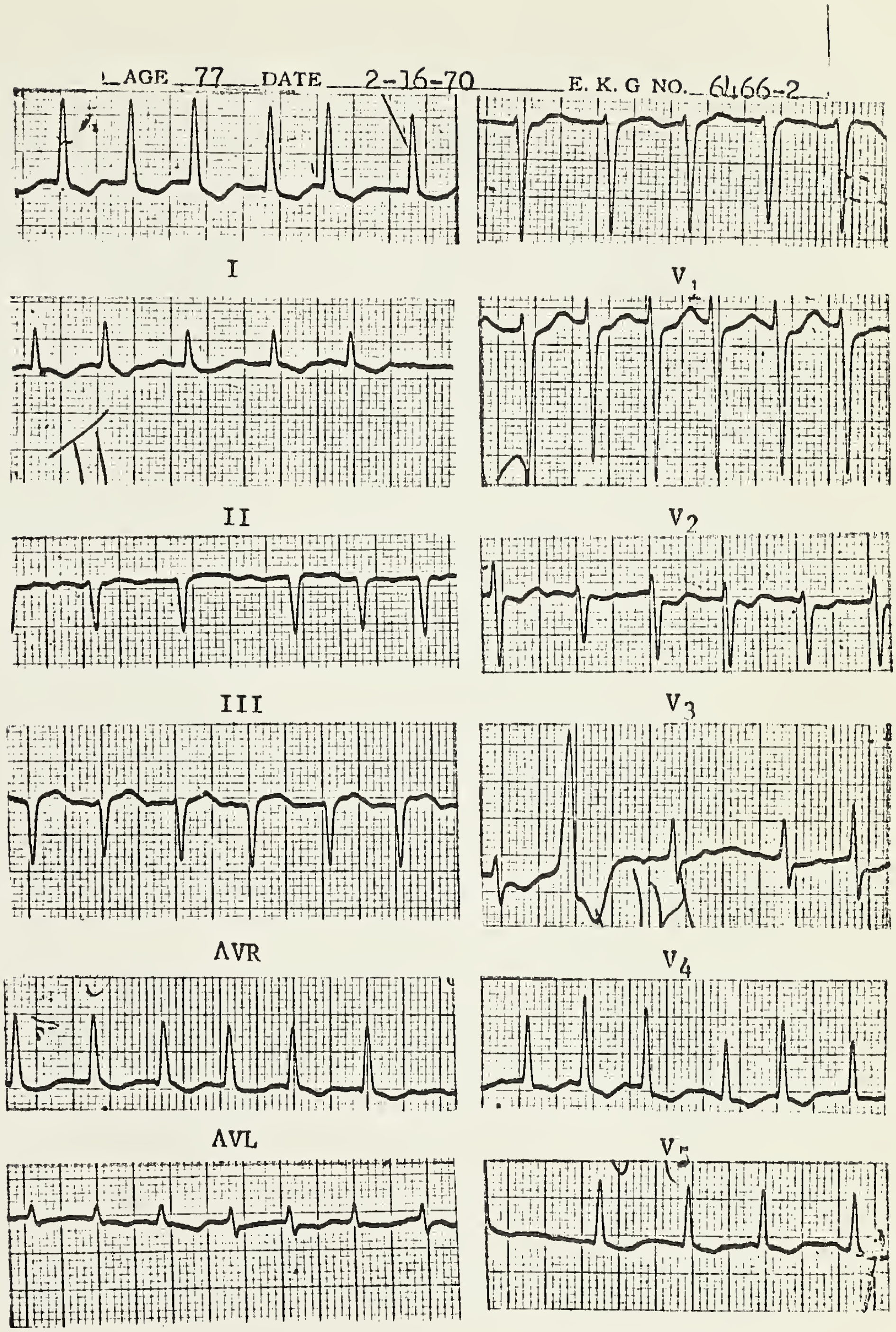


Fig. 2. Atrial fibrillation with an ectopic ventricular beat in V_4. Serum K level—2.1 meq.

from 3.2 meq /liter. Potassium therapy alone without digitalis converted the atrial fibrillation to normal sinus rhythm. Surawicz reported that the anti-arrhythmic effect of potassium takes place when the potassium concentration in the serum is increased by 0.5 to 1.5 meq./liter. Our patient converted to normal sinus rhythm when the serum potassium was raised from 2.1 to 3.5 meq./liter.

The concentration of the body electrolytes Na, K, Ca, and Mg, are intimately related with the rhythmic function of the heart and the conductivity of the cardiac impulse. Alterations in the concentration of these electrolytes may result in various arrhythmias and conduction defects.

The ratio of intracellular to extracellular potassium in the myocardium plays a very important role in the generation of electrical potentials across the cell membrane and also in the production of cardiac arrhythmias and conduction defects. The normal balance of intracellular and extracellular potassium prevents cardiac arrhythmias. Abnormal serum concentrations (hypokalemia or hyperkalemia) disturbs the ratio of intracellular and extracellular potassium. Diseases of the myocardium will also shift the potassium across the cell membrane, as in myocardial infarction or primary myocardial disease.

Physiology

During the spread of excitation, all myocardial fibers undergo rapid depolarization of the cell membrane. This results in a reversal of electrical charges between the inside and outside of the cell, followed by a slow repolarization and then by a period of recovery. Depolarization and reversal of charges is caused by the rapid influx of Na into the cell, which is due to an increase in the permeability of the membrane to this ion. Repolarization results from the increased permeability of the cell to potassium which causes a more rapid exit of this ion from the cell. During the recovery phase, the sodium ions which had entered the cell during excitation leave the cell and the potassium ions return to the cell. These ionic movements have been attributed to the action of a hypothetical "ionic pump" which requires energy of the cellular metabolism. Changes in the depolarization and repolarization of these myocardial fibers can affect the spread of impulses through the heart and give rise to a variety of arrhythmias and conduction disturbances.

In hypokalemia, automaticity of ectopic supraventricular and ventricular pacemakers is increased. This is due to the prolongation of the repolarization period, that phase when the cell membrane is hyperpermeable to potassium exit. At the time when the refractory period is over, the repolarization is not completed so that the mem-

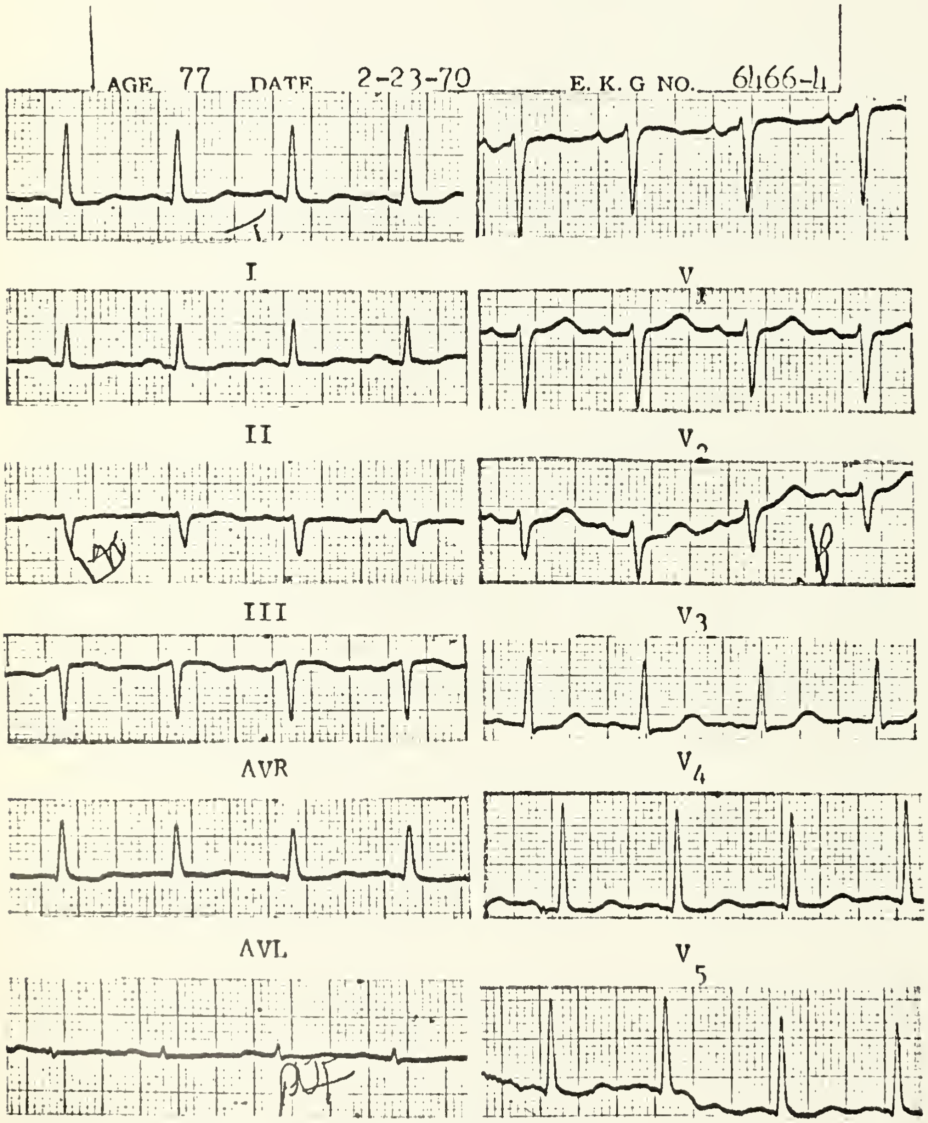


Fig. 3. Normal sinus rhythm. Serum K level—3.5 meq.

brane potential is closer to the threshold potential and less current is required for spontaneous depolarization.

The anti-arrhythmic effect of potassium is attributed to a slowing of the diastolic depolarization of the pacemaker fibers. The effect usually precedes the depression of conduction and shortening of the refractory period. Slowing of diastolic depolarization suppresses pacemaker activity because more time is required to reach the threshold potential.

The sensitivity of the atria to the depolarizing effect of potassium suggests that hyperkalemia may suppress atrial fibrillation or flutter at concentrations which do not significantly affect ventricular activity.

Potassium decreases the rate of discharge of ectopic pacemakers in the AV node, bundle of His and its branches, and the Purkinje fibers. Ectopic pacemakers are more sensitive to potassium than the pacemaker fibers of the SA node. Consequently, when arrhythmias are due to increased automaticity of ectopic pacemakers, potassium suppresses this activity and enables the SA node to take control of the cardiac rhythm. It is worth mentioning that the present main anti-arrhythmic drugs like Quinidine, Procaine amide, Lidocaine, and Propanolol do not restore normal function by correcting the cause, but rather by further disturbing the equilibrium of the cardiac muscle membrane in such a manner as to exert a favorable influence.

Summary

Atrial arrhythmias occur with low serum potassium levels in association with, as well as, independent of Digitalis toxicity. A case is presented correlating the development of spontaneous atrial fibrillation with rapid lowering of the serum potassium and a return to normal sinus rhythm with selective correction of the serum electrolyte abnormality alone.

The role of potassium in cellular physiology during depolarization and repolarization is reviewed, and the mechanism producing such an arrhythmia is discussed.

References

1. Fisch, C., Knoebel, S.B., Feigenbaum, H., Greenspan, K.—Potassium and the Monophasic Action Potential, Electrocardiogram, Conduction and Arrhythmias. *Prog. Cardiovasc. Dis.* 8:387, 1966.
2. Freidberg, C.K., and Donoso, E.—Arrhythmias and Conduction Disturbances due to Digitalis. *Prog. Cardiovasc. Dis.* 2:408, 1959-1960.
3. Irving and Corday—Disturbances in Heart Rate and Rhythm, W.B. Saunders, Philadelphia, 1962, pp. 266 and 311.
4. Surawicz, B.—Relationship between EKG and Electrolytes. *American Heart Journal* 73:814, 1967.
5. Freidberg, C.K.—Diseases of the Heart—W.B. Saunders, Philadelphia, 1966, p. 1564.
6. Pick, A.—Arrhythmias and Potassium in Man—*Am. Heart Journal* 72:295, 1966.
7. Surawicz, B., et. al—Hemodynamic and EKG Effects of Hyperpotassemia. Differences in Response to Slow and Rapid Increases in Concentration of Plasma K. *Am. Heart Journal* 73:647, 1967.
8. Pullen, H., et. al—Intensive IV Potassium Replacement Therapy. *Lancet* 2:809, 1967.
9. Sarma, et. al—Atrial Fibrillation in Chronic Diarrhea Corrected with Oral Potassium. *Indian Heart Journal* 18:167, 1966.
10. Lockey, et. al—K and Open Heart Surgery. *Lancet* 1:671, 1968.
11. Surawicz, B.—The Role of Potassium in Cardiovascular Therapy. *Medical Clinics of North America* Vol. 52:1103, 1968.
12. Surawicz, B.—Role of Electrolytes in Etiology and Management of Cardiac Arrhythmias. *Prog. Cardiovasc. Dis.* 8:346, 1966.
13. Dreifus, L.S., Katz, M., Watanabe, Y., and Likoff, W.—Clinical Significance of Disorders of Impulse Formation and Conduction of the Atrioventricular Junction. *Am. Journal of Cardiology,* 11:1022, 1957.
14. Ganong, William F.—Review of Medical Physiology. Lange Publisher, California, 1965, p. 422.

Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This was the third pregnancy of this 39-year-old 0+ G III, P I white mother. Eleven years earlier she had a spontaneous abortion at about 10-12 weeks gestation. Eight years previously she delivered a full term female who is alive and well. At 34 weeks of gestation the mother had sudden onset of preeclampsia (blood pressure of 150-160/100-110, edema of lower lids, headaches and 4+ albumin in her urine). Despite bed rest at home symptoms did not improve so that she was hospitalized at 35 weeks. After 10 days hospitalization and careful management (strict bed rest, Apresoline-Serpasil, low salt diet, Duiril, etc.) her preeclampsia came under good control. Despite the advice of her doctor she insisted upon discharge and he concurred. After arriving home she noticed some leakage of amniotic fluid but no labor pains and the fluid ceased within 6 to 12 hours after it started. At 38 weeks of gestation she went into rapid labor so that 1 hour 40 minutes later she delivered her son. At delivery it was noted that the amniotic fluid was thick, green and foul smelling and her blood pressure was 150/100 with 4+ albumin in the urine but no edema.

Fetal

This 3 lb. 7½ oz. male infant had an Apgar of five at one minute and again at five minutes and did not become ten until ten minutes. Cord blood was B+ with ABO and Coombs tests negative. Initial exam at three hours of age after being placed in isolette with oxygen was normal except for circumoral cyanosis. At four hours of age, five per cent glucose/water with 0.2 N Saline by nipple was started. By 13 hours of age infant's hands and feet became noticeably edematous. At 16 hours of age infant became dusky in oxygen and developed intermittent respiratory distress that lasted until death at 75 hours of age (respiratory rate varied from 20 to 30 up to 120 to 160). At 60 hours of age a chest X-ray was done that was interpreted as normal. His heart rate was noted at this time to be 160-170 per minute and so he was digitalized (digoxin 0.02 mgm I.M. and repeated two more times at four hour intervals.) This seemed to make no difference. From 65 thru 68 hours of age the infant had five to 10-second intermittent clonic convulsions. No treatment was given. At 68 hours of age Kanamycin 10 mgm I.M. q 12 h and Cryst. aq. Penicillin 150,000 U q 12 h I.M. were started. Despite this the infant expired at 75 hours of age. An autopsy revealed E.Coli and Alpha Strept Infection in the chest (bronchopneumonia) and in the CNS (meningitis).

Perinatal Committee Comments

1. The Committee felt obstetrical care could have been improved in the following ways:
   (a) Blood pressures in preeclamptic patients must be followed very closely.
   (b) Magnesium Sulfate carries less risk to the infant than Apresoline-Serpasil and properly used will control blood pressure satisfactorily.
   (c) The obstetrician should decide when a patient goes home and not the patient.
   (d) When unusual conditions exist in a pregnancy (i.e., preeclampsia, foul, smelly, green amniotic fluid, etc.) it is imperative that the pediatrician know this (best by *personal* communication from the obstetrician).
2. The Committee felt pediatric care could have been improved in the following ways:
   (a) In a premature with respiratory problems early suspicion of possible infection must be considered and antibiotics started.
   (b) Studies of calcium, phosphorous, glucose, etc., should be done if any convulsions develop in an infant.

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

Campbell's Soups...
wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help—for these four very good reasons:

Appeal With a variety of tastes, textures, aromas, and colors, Campbell's Soups can add interest and appetite appeal. And they're easy to eat—ingredients are tender, bite-size. Even patients on special diets will find soups they can enjoy among the more than 50 different varieties available.

Nourishment Campbell's Soups contain selected meats and sea foods, best garden vegetables—carefully processed to help retain their natural flavors and nutritive values.

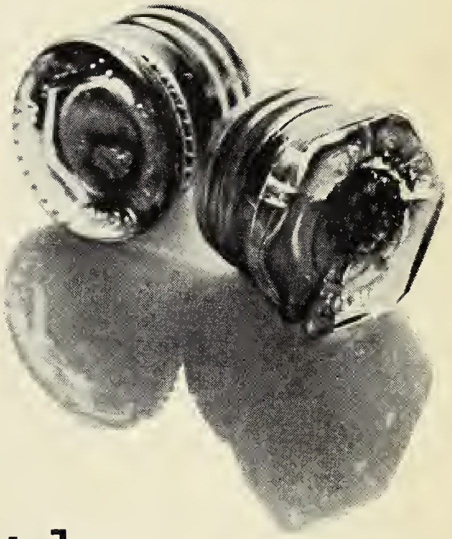
Convenience Within 4 minutes a bowl of delicious soup is heated and ready to eat.

Economy Campbell's Soups are inexpensive—an important consideration to those whose budgets are limited.

Recommend Campbell's Soups . . . and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*

Campbell's
CONDENSED
SOUP

Break the ulcer circuit to hyperacidity, hypermotility and ulcer pain.



Pro-Banthine®

propantheline bromide

A Relief Factor in Peptic Ulcer

Worry, frustration, job pressure—all set up excessive vagal currents in patients with peptic ulcer.

Pro-Banthīne "insulates" the stomach, the duodenum and the lower ntestinal tract—the sites where these destructive currents take their toll.

This "insulation" helps block excessive enteric activity and acidity, thus helping to provide the proper environment for the healing of peptic ulcers.

It's nice to know that Pro-Banthīne provides this protection at a dosage that causes little or no discomfort and that, unlike ataractic agents, Pro-Banthīne does not cloud the patient's awareness or thought processes.

By moderating excessive vagal currents Pro-Banthine relieves spasm, acid burn and pain. By reducing gastric motility Pro-Banthīne also prolongs the activity of antacids.

Indications: Peptic ulcer, gastroenteritis, pylorospasm, biliary dyskinesia, functional hypermotility and irritable colon.

Contraindications: Glaucoma, severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in elderly men with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

Dosage: The maximal tolerated dosage is usually the most effective. For most adult patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthīne is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

SEARLE *Research in the Service of Medicine*
Distributed by G. D. Searle & Co., P. O. Box 5110, Chicago, Illinois 60680

Triaminic
Relieves stuffy and runny noses–promptly.
Makes your patient's world a little sunnier.

Triaminic®

pheriylpropanolamine hydrochloride, pyrilamine maleate, pheniramine maleate

"the Sunshine Tablet"

Formula: Each timed-release tablet contains phenylpropanolamine hydrochloride, 50 mg.; pyrilamine maleate, 25 mg.; pheniramine maleate, 25 mg. **Indications:** Relief from such symptoms as nasal congestion, profuse nasal discharge and postnasal drip associated with colds, nasal allergies, sinusitis and rhinitis. **Precautions:** Patients should not drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in the presence of hypertension, hyperthyroidism, cardiovascular disease, or diabetes. **Side Effects:** Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. **Dosage:** Adults—one tablet swallowed whole, in morning, midafternoon and before retiring. **Availability:** In bottles of 100, 250.

Rx
ONLY

Dorsey Laboratories, Lincoln, Nebraska, 68501

The concert was just underway,
When to the conductor's dismay
Cramps and diarrhea,
Did so quickly appear,
The maestro no longer could stay.

Because diarrhea with cramping, nausea, and painful straining can strike at the most inopportune time, it takes a comprehensive agent to treat the total diarrheal syndrome and help get the patient back on the job. That's why so many physicians rely on Donnagel, especially during the fall and winter months when "flu" and viral gastroenteritis usually hit their peak.
Donnagel is much more than just a simple kaolin-pectin combination. It also contains the belladonna alkaloids to calm GI hypermotility and help relieve the distressing discomforts which so often accompany diarrhea. Certainly it's less expensive and more convenient than taking two medications. And the dosage is lower too. Available in the handy 4-oz. plastic bottle at pharmacies everywhere on your prescription or recommendation.

Schuberts'
Unfinished
Symphony

When diarrhea and its discomforts separate a man from his job . . .

Donnagel®

Each fluid ounce contains: Kaolin, 6 g.; Pectin, 142.8 mg.; Hyoscyamine sulfate, 0.1037 mg.; Atropine sulfate, 0.0194 mg.; Hyoscine hydrobromide, 0.0065 mg.; Sodium benzoate (preservative), 60 mg.; Alcohol, 3.8%.

A·H·ROBINS

A. H. Robins Company,
1407 Cummings Drive,
Richmond, Va. 23220

Coughs are back.
3444
3444
4 FL. OZ.
A·H·ROBINS
Robitussin
GLYCERYL GUAIACOLATE
EXPECTORANT
Alcohol 3.5 per cent
KEEP THIS AND ALL MEDICINES OUT OF REACH OF CHILDREN
FOR THE TEMPORARY RELIEF OF COUGHS DUE TO COLDS
4 FL. OZ.
A·H·ROBINS
Robitussin A-C
EXPECTORANT, ANTIHISTAMINIC
Codeine phosphate 10.0 mg
Warning: May be habit forming
Glyceryl guaiacolate 100.0 mg
Pheniramine maleate 7.5 mg
Alcohol 3.5 per cent
In a palatable aromatic syrup.
FOR THE TEMPORARY RELIEF OF COUGHS DUE TO COLDS
4 FL. OZ.
A·H·ROBINS
Robitussin-DM
EXPECTORANT
COUGH SUPPRESSANT
Glyceryl guaiacolate 100.0 mg
Dextromethorphan hydrobromide 15.0 mg
In a palatable aromatic syrup.
KEEP THIS AND ALL MEDICINES OUT OF REACH OF CHILDREN
A·H·ROBINS
Robitussin-PE
Glyceryl guaiacolate 100 mg
4 FL. OZ.
Cough Calm
Robitussin-DM
Cough Formula in

clear the tract
with the

Robitussin® Line

The coughing season is here again. Time to rely on the four Robitussins and Cough Calmers to help clear the lower respiratory tract. All contain glyceryl guaiacolate, the efficient expectorant that works systemically to help increase the output of lower respiratory tract fluid. The enhanced flow of less viscid secretions soothes the tracheobronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise. Available on your prescription or recommendation.

For coughs of colds and "flu"

Robitussin®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.

Alcohol, 3.5%

For unproductive allergic coughs

Robitussin A-C®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Pheniramine maleate	7.5 mg.
Codeine phosphate	10.0 mg.

(warning: may be habit forming)
Alcohol, 3.5%

Non-narcotic for 6-8 hr. cough control

Robitussin-DM®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Dextromethorphan hydrobromide	15.0 mg.

Alcohol, 1.4%

Clears sinuses and nasal stuffiness as it relieves cough

Robitussin-PE®

Each 5 cc. contains:

Glyceryl guaiacolate	100.0 mg.
Phenylephrine hydrochloride	10.0 mg.

Alcohol, 1.4%

Robitussin-DM in solid form for "coughs on the go"

Cough Calmers®

Each Cough Calmer contains:

Glyceryl guaiacolate	50.0 mg.
Dextromethorphan hydrobromide	7.5 mg.

Select the Robitussin® "Clear-Tract" Formulation That Treats Your Patient's Individual Coughing Needs:

Robitussin® extra benefit chart

All 5 Robitussins have an EXPECTORANT-DEMULCENT action. Keep this handy chart as a guide in selecting the formula that provides the *extra* benefits you want for your patient.

	Cough Suppressant	Antihistamine	Long-Acting (6-8 hours)	Nasal, Sinus Decongestant	Non-Narcotic
ROBITUSSIN®					●
ROBITUSSIN A-C®	●	●			
ROBITUSSIN-DM®	●		●		●
ROBITUSSIN-PE®				●	●
COUGH CALMERS™	AHR		AHR		AHR

A. H. Robins Company, Richmond, Va. 23220 A·H·ROBINS

50 Students Learn at Michigan Community Hospitals; MSMS Project

By Suzanne Stephan
East Lansing

The second summer of Michigan's participation in the Student American Medical Association-Medical Education and Community Orientation (SAMA-MECO) summer project, which places medical students with community hospitals throughout the state, marked an increase of students from 11 to 50 and a corresponding increase in the program's scope and effectiveness.

The goals of the program are twofold and aim to benefit mutually the students and communities involved.

The 30 Michigan hospitals and clinics sponsoring students this summer have made it possible for the future physicians to learn about patient care. The SAMA project enabled the student, under the guidance of the directing physician, to assist in the giving of physical examinations, to observe surgical procedures, and to study and discuss the treatment of disease. In addition, the student received valuable exposure to the various departments of the hospital in which he was placed. These include pathology, radiology—isotope therapy and X-rays, demography of health problems, and hospital administration, encompassing the financial, administrative and public relations operations.

The hospitals, county medical societies, and communities, for their parts, hope that the sponsored students will, after receiving their medical degrees, make the decision to establish practice in an area similar in need and size to the ones responsible for their unique summers of firsthand involvement in the medical world.

This year students from all three medical schools took part in the Michigan program. A list of hospitals and clinics contacted by the Michigan State Medical Society and the Michigan Hospital Association which had indicated an interest in sponsoring one or two students was made available to the medical schools at Wayne State University, the University of Michigan, and Michigan State University. Students then applied for the program and they were matched by SAMA coordinators. Each hospital or clinic provided room and board, as well as a stipend. While none of the training received can be counted as college credit in Michigan, certain universities in other states do accept the summer's work as partial fulfillment of academic requirements.

The Michigan SAMA leader was Randall Riggs, Grosse Pointe, a sophomore medical student at the Wayne State University School of Medicine. Randy spent the summer in Ishpeming under the sponsorship of the Williams Clinic and Francis A. Bell Memorial Hospital. He noted, "In traditional medical programs there has been minimal exposure to small community hospitals," adding that this experience constituted "a different kind of medicine" than occurs in large urban university-affiliated hospitals. He further remarked of small community medicine, "The problems are different."

Additional comments by Randy make the communities' hopes that some of the students they sponsor will return to practice there, fully understandable. He observed that in Michigan the overall population to physician ratio is 860 to 1, but "the ratio in some areas of the U.P. may be as much as five times that number." At this point in his career, Randy is seriously considering establishing his practice in a small community, although he is "open to experience" with regard to exactly where he'd like to settle.

Stephen Douglas, a third year medical student at WSU, spent seven weeks at St. Mary's Hospital, Marquette, and assisted in local hospitals and doctors' offices. Stephen began in Marquette in obstetrics and gynecology and observed several obstetrical operations and deliveries. During July he spent many morning hours in general surgery, using his afternoons for visits to ward patients. He commented, "I am impressed by the willingness and sincerity of local physicians. They have given me a valuable orientation to my clinical years in medicine, and I believe this should be the aim of any program like this one." He added that he found Marquette to be "a medically active community with excellent facilities for office-based patient care." Tailored for pre-clinical students, the program is unique in offering actual hospital

---

Acting Managing Editor, **Michigan Medicine.**

Sprigg codes **Subber** hayfeber **Awtubb** allerdgies **Widder** "flu"

relieve them all with all-season ISOCLOR®

timesule® tablet liquid

VO ACTIVE COMPONENTS
ve "four season" sufferers dependable relief

ılorpheniramine Maleate dries runny noses and eyes, quiets ıeezing, wheezing, soothes itching and reduces postnasal drip— with a particularly low index of side effects such as drowsiness.

ıeudoephedrine HCl: decongests throughout *entire* respiratory ıct, opening nasal passages, dilating bronchioles, relaxing ght chest"—as effectively as ephedrine, but with much less NS or cardiovascular stimulation.

ƆMPOSITION: Each tablet or 10 cc. (2 teaspoonsful) of liquid ntains:

ılorpheniramine Maleate .... 4 mg.
eudoephedrine HCl .... 25 mg.

Each Isoclor Timesule contains:

ılorpheniramine Maleate .... 10 mg.
eudoephedrine HCl .... 65 mg.
a special pellet form providing both prompt and sustained effect.

DICATIONS: For relief of upper respiratory and bronchial constion associated with: the common cold, hay fever and allerıs, sinusitis, influenza, and vasomotor and allergic rhinitis.

ƆNTRAINDICATIONS: Sensitivity to antihistamines or sympathomimetic agents. Severe hypertension or severe cardiac disease.

PRECAUTIONS: Use with caution in patients with hyperthyroidism. Patients susceptible to the soporific effects of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CAUTION: Federal law prohibits dispensing without prescription.

SUPPLIED: Tablets: Bottles of 100; Liquid: Pints and gallons: Timesules: Bottles of 50, 250, and 1000.

DOSAGE AND ADMINISTRATION:	Tablets	Liquid	Timesule
Adults:	1 q. 3-4 h.	2 tsp. q. 3-4 h.	1 q. 12 h.
Children 6-12 years:		1 tsp. q. 3-4 h.	
40-50 pounds:		¾-1 tsp. q. 3-4 h.	
30-40 pounds:		½-¾ tsp. q. 3-4 h.	
20-30 pounds:		¼-½ tsp. q. 3-4 h.	
15-20 pounds:		⅛-¼ tsp. q. 3-4 h.	

ARNAR-STONE LABORATORIES, INC.
Mount Prospect, Illinois, U.S.A. 60056
Subsidiary of American Hospital Supply Corporation

experience to the student; often group practice clinic exposure is also included, in addition to the preceptorship rotation through clinical and nonclinical aspects of medicine.

Dwight M. Schroeder, MD, project coordinator at Leelanau Memorial Hospital, noted that even if the program does not necessarily produce more MD's in family practice in small towns, it will nevertheless give specialists more insight into the problems which beset a doctor in family practice. He further pointed out that the project has been useful even if it lets a medical student know that the clinical side of medicine is not for him. Two students were placed at Leelanau Hospital this summer—Cynthia Markus, of the U-M, and Norman E. Walter, WSU.

Port Huron Hospital Administrator Charles W. McKinley observed that the summer externship gives a student a much different medical perspective than he receives from a textbook or in a classroom. He noted that the major portion of the project's expenses is financed by local doctors who are deeply and personally interested in furthering medical education. Observing that one aim of the program is to show young medical students that the "establishment" isn't all bad, Mr. McKinley added that "This is realized when they see the physicians in action, when they see that they are up-to-date in patient care and intent upon improving the quality and delivery of medical care."

As A. Robert VanTuinen, WSU, who spent the summer at Port Huron General Hospital remarked, "A program such as this so early in med school has the advantage of illustrating just what options are available. While keeping students motivated it also provides some idea of what to expect later in their medical careers." Michigan's numerous small communities, scattered throughout the state's vast area, hope for the sake of their often isolated residents that for at least some of these ambitious medical students, future career priorities will include desperately needed small-town practice.

This summer's SAMA-MECO project was again offered under the auspices of the Michigan State Medical Society, the Student American Medical Association, the Michigan Hospital Association, and the Michigan Academy of General Practice.

Harold R. Roehm, MD, Pontiac,

who recently retired, was saluted in the *Pontiac Press* for his nearly half century of service. In addition to his regular practice, Doctor Roehm, who helped set up the pediatric division at St. Joseph Mercy Hospital in 1927, is an expert on old wood and old silver.

New Members

Eli Abramson, MD, 339 Westchester Rd., Saginaw 48603
James S. Close, MD, 701 N. Logan, #505, Lansing 48915
Konrad A. Garstka, MD, 401 W. Greenlawn, Lansing 48910
E. F. Kronschnabel, MD, 1414 W. Fair Ave., Marquette 49855
Joseph M. Malin, Jr., MD, Detroit General Hospital, Detroit 48226
Kenneth W. Teich, MD (Reinstatement), 1500 Fifth Ave., McKeesport Hosp., McKeesport, Pennsylvania 15132
Jay E. Kellaway, MD, 1915 Lotus, S.E., Grand Rapids 49506
Gary D. Maynard, MD, 216 Bronson Medical Ctr., Kalamazoo 49006
Frederick W. Close, MD, 833 Lake Dr., SE., Grand Rapids 49506
Steven S. Palmer, MD, 515 Lakeside Dr., S.E., Grand Rapids 49506
Sanford J. Rautbort, MD (Reinstatement), 96 Barrington Rd., Bloomfield Hills 48013
Mohammed Zaman, MD, 515 Main St., #3, Dowagiac 49047

Scientific Sessions

presents a Seminar with a distinguished faculty

Ala Moana Hotel—Honolulu, Hawaii

FEBRUARY 21, 22, 23, 1972

- *Electrocardiography: Model for Normal and Intraventricular Conduction Defects Heart Block & Hemiblock: Indications for Pacing*
  Peter C. Block, M.D., Cardiac Unit,
  Mass. General Hospital
- *Diagnosis, Treatment, Prevention of Specific Viral Diseases in Man*
  Thomas C. Merigan, M.D., Chief
  Div. Infectious Diseases,
  Stanford Univ. Medical Center
- *Cancer Immunology Applied to Early Diagnosis of Tumor Growth, Detection CEA in Patient's Blood*
  Phil Gold, M.D., Ph.D., F.R.C.P. (C).
  Montreal General Hospital Div.
  Clinical Immunology & Allergy

Registration Limited
Program Director, Dr. Robert L. Pekarsky

Enclosed is my registration fee of $175.00
(Check payable to Scientific Sessions,
217 Alexander St., Rochester, N.Y. 14607)

☐ Want assistance with airline reservations
☐ Information on group tours
☐ Will make reservations with Ala Moana Hotel for Special Scientific Sessions Rate

DR.____________________

ADDRESS____________________

Kelley Describes State Environmental Protection Act

By Attorney General Frank J. Kelley

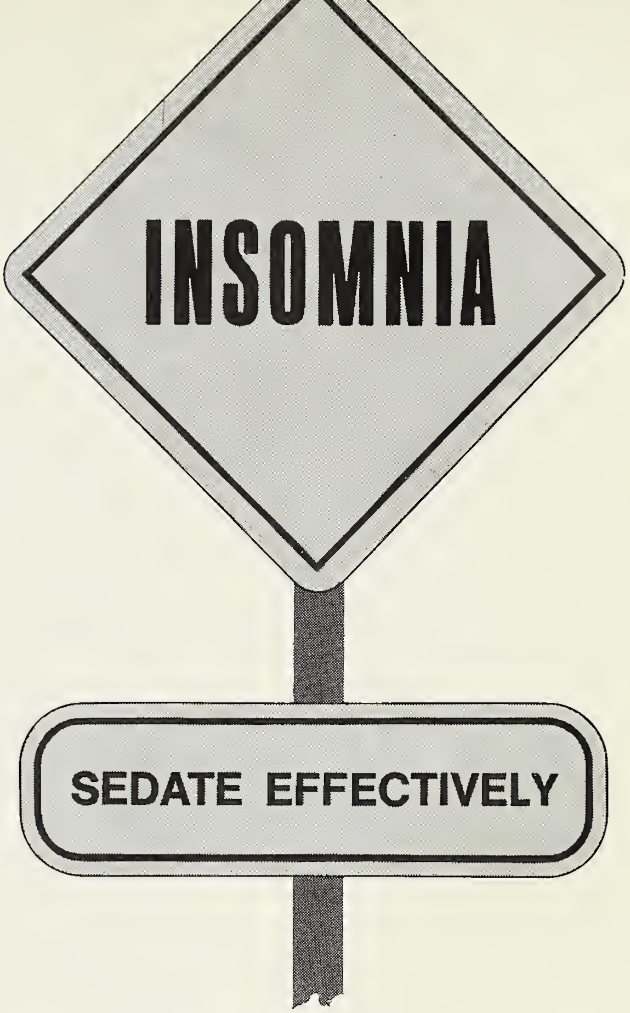
Michigan's Environmental Protection Act of 1970, the first of its kind in the nation, has given every Michigan resident important legal weapons to fight harmful pollution. The Act permits any person to bring an action in circuit court for the protection of air, water, or other natural resources from pollution, impairment, or destruction. Prior to the passage of this law, a private citizen had no legally recognized interest in protecting the environment as a whole; he could only bring legal action against pollution which caused direct and measurable harm to himself or his property.

The Environmental Protection Act applies to the conduct of private individuals, corporations, partnerships, associations, and the state and its political subdivisions (including cities, townships, and counties). Thus, under the Act a private citizen can sue a city for discharging sewage into a river or lake, or for allowing a municipal power plant to pollute the air with dense smoke.

If the defendant's conduct falls under the authority of a state administrative agency (such as the Air Pollution Control Commission), the court may remit the parties to that agency for its normal proceedings. The court, however, retains ultimate authority to rule on the environmental effects of the defendant's conduct.

Defendants are protected against "harassment" suits by two features of the Act: first, the court may require the complaining party to post a $500 bond to cover court costs in the event he loses the suit, and, secondly, the defendant may prevail if he can prove that there is no reasonable and prudent alternative to his conduct, and that his conduct is consistent with the public health, safety, and welfare, in light of the state's interest in protection of its natural resources.

The 1970 Act serves as much more than a supplement to Michigan's 1929 Water Resources Act and 1965 Air Pollution Control Act. It endows every citizen with the right to an unimpaired environment, and with the means to enforce that right.



With QUĪ-A-ZONE — you can sedate effectively. A balanced combination of short, intermediate, and long-acting barbiturates (totaling 100 mg.) in a rapidly disintegrating tablet — sedation is provided within a few minutes . . . followed by sound restful sleep . . . usually without morning hangover. The four barbiturates in QUĪ-A-ZONE have dual channels of elimination (renal and hepatic) to lessen metabolic burden, decrease barbiturate retention, and minimize depression.

QUĪ-A-ZONE™

Each rapidly-disintegrating tablet contains 25 mg. secobarbital, 25 mg. pentobarbital, 25 mg. butabarbital, and 25 mg. phenobarbital. Bottles of 100.
Usual Adult Dose: 1 to 2 tablets before retiring.
PRECAUTION: Should not be administered to patients sensitive to barbiturates, or in cases of known previous addiction. Warning: May be habit forming.

W-C PRECISION PHARMACEUTICALS

SEND FOR SAMPLES.

WALKER, CORP & CO., INC.
Syracuse, New York 13201

Medical care programs

By Herbert Mehler, Staff Assistant
MSMS Committee on
Governmental-Medical Care Programs

A comprehensive actuarial study of all of the major proposals for national health insurance arrangements prepared by HEW has been released for the information of congressional committees studying the issue.

The actuarial report's prediction of gross underfinancing in the Kennedy proposal for federal assumption of the bulk of health care costs was the most noteworthy item in the 83-page report.

The major plans before Congress would compare in terms of additional costs to the government as follows:

Administration—$2.6 billion
Kennedy—$59.4 billion
Medicredit (backed by the AMA)—$6.3 billion
Burleson (the health insurance industry plan) —$7.3 billion
Javits (medicare for all)—$41.6 billion
Hall-Long (Catastrophic only)—$3.2 billion, $3.1 billion
Pell-Mondale (mandated employer plans, health care corporations)—$4.9 billion

For the most part, these costs represent "transferred" spending from the private sector to the federal sector. In the case of Medicredit, financed largely by tax credits for purchase of comprehensive private insurance, most of the "cost" represents a revenue loss rather than an additional expense.

The HEW report said overall federal spending under the Kennedy bill, including existing programs it would take over, would total $81.6 billion in the fiscal year 1974, but that the proposed financing would raise only $57 billion. Thus, it would be under-financed by 43 percent, or $24.6 billion.

National health expenditures of all kinds will rise to $105.4 billion in fiscal 1974, an average increase of 12 percent a year, if none of the major proposals is enacted. Operation of the Kennedy program in fiscal 1974 would result in total U.S. health spending (government and private) of $113.8 billion; the administration bill, $107.2 billion; the insurance industry bill, $110 billion; and Medicredit, $109.5 billion.

Pre-Sate® **(chlorphentermine hydrochloride)**
Caution: Federal law prohibits dispensing without prescri
tion.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated
exogenous obesity, as a short term (i.e. several weeks) adjun
in a regimen of weight reduction based upon caloric restrictio

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hyperse
sitivity to sympathomimetic amines, and agitated states. Pr
Sate (chlorphentermine hydrochloride) is also contraindicate
in patients with a history of drug abuse or symptomatic cardi
vascular disease of the following types: advanced arteri
sclerosis, severe coronary artery disease, moderate to seve
hypertension, or cardiac conduction abnormalities with dang
of arrhythmias. The drug is also contraindicated during
within 14 days following administration of monamine oxida
inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosa
should not be increased in an attempt to obtain increased an
rexigenic effect; discontinue the drug. Tolerance to the anorect
effect may develop. Drowsiness or stimulation may occur a
may impair ability to engage in potentially hazardous activiti
such as operating machinery, driving a motor vehicle, or pe
forming tasks requiring precision work or critical judgme
Therefore, such patients should be cautioned accordingl
Caution must be exercised if Pre-Sate (chlorphentermine hydr
chloride) is used concomitantly with other central nervo
system stimulants. There have been reports of pulmonary hype
tension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abus
Patients have been known to increase the intake of drugs
this type to many times the dosages recommended. In lon
term controlled studies with the high dosages of Pre-Sat
abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermi
hydrochloride) in human pregnancy has not yet been clear
established. The use of anorectic agents by women who are
who may become pregnant, and especially those in the fir
trimester of pregnancy, requires that the potential benefit
weighed against the possible hazard to mother and child. Us
of the drug during lactation is not recommended. Mammali
reproductive and teratogenic studies with high multiples of t
human dose have been negative.
Usage In Children Not recommended for use in children und
12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of i
sulin requirements due to dietary restrictions and weight los
Pre-Sate (chlorphentermine hydrochloride) should be used wi
caution when obesity complicates the management of patien
with mild to moderate cardiovascular disease or diabetes me
litus, and only when dietary restriction alone has been unsu
cessful in achieving desired weight reduction. In prescribi
this drug for obese patients in whom it is undesirable to intr
duce CNS stimulation or pressor effect, the physician shou
be alert to the individual who may be overly sensitive to th
drug. Psychologic disturbances have been reported in patient
who concomitantly receive an anorectic agent and a restricti
dietary regimen.

Adverse Reactions
Central Nervous System: When CNS side effects occur, the
are most often manifested as drowsiness or sedation or ove
stimulation and restlessness. Insomnia, dizziness, headach
euphoria, dysphoria, and tremor may also occur. Psychot
episodes, although rare, have been noted even at recommend
doses. **Cardiovascular:** tachycardia, palpitation, elevation
blood pressure. **Gastrointestinal:** nausea and vomiting, dia
rhea, unpleasant taste, constipation. **Endocrine:** changes
libido, impotence. **Autonomic:** dryness of mouth, sweatin
mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis an
rarely, difficulty in initiating micturition. **Others:** Paresthesia
sural spasms.

Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphe
termine hydrochloride) is one tablet (equivalent to 65 mg chlo
phentermine base) taken after the first meal of the day. Use
children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, ha
lucinations, panic states, and hyperpyrexia may be manifest
tions of acute intoxication with anorectic agents. Fatigue an
depression usually follow the central stimulation. Cardiova
cular effects include arrhythmias, hypertension, or hypotensi
and circulatory collapse. Gastrointestinal symptoms inclu
nausea, vomiting, diarrhea, and abdominal cramps. Fat
poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sym
pathomimetic amines is largely symptomatic and supporti
and often includes sedation with a barbiturate. If hypertension
marked, the use of a nitrate or rapidly acting alpha-recept
blocking agent should be considered. Experience with hem
dialysis or peritoneal dialysis is inadequate to permit recom
mendations in this regard.

How Supplied
Each Pre-Sate (chlorphentermine hydrochloride) tablet con
tains the equivalent of 65 mg chlorphentermine base; bottles
100 and 1000 tablets.

Full information is available on request.

take a new
look at
Pre-Sate®
(chlorphentermine
HCl)

the increasingly practical
appetite suppressant

low potential for:

- ☐ stimulatory 'jolt'
- ☐ post-therapeutic 'let-down'
- ☐ excessive CNS stimulation
- ☐ drug abuse

Pre-Sate promotes normal patterns of food intake and is a safe, effective supplement to your total program of caloric reduction

Pre-Sate—a short-term adjunct... not a substitute...to your total program of weight reduction

Warner-Chilcott
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

W|C

PS-GP-11-BW

GUILMET *v.* CAMPBELL

CRISIS? CONFUSION? COMEDY?

By A. Stewart Kerr, Detroit
MSMS Legal Counsel

1. Several years ago, a lawsuit was filed in Pontiac by Mr. and Mrs. Guilmet against Dr. Kenneth N. Campbell and Dr. Joseph A. Arena. The result has provoked unusual interest and controversy. What is the significance of this case and how did it reach the peculiar prominence that it currently has?

2. Mr. Guilmet suffered from peptic ulcer. He was referred to and operated upon by Dr. Campbell, with assistance from Dr. Arena. Dr. Campbell was the physician in charge. The post-operative course was beset with unfortunate complications and considerable additional surgery was required. Mr. Guilmet fell victim to hepatitis, encountered various other ailments, temporarily lost almost 50 percent of his weight and probably has long-term or permanent injury. He returned to his original, referring physician for further care.

3. The suit which the Guilmets filed was in the usual two counts: one for negligence and one for so-called breach of contract. Such two-count malpractice cases are common, almost customary, in Michigan. It has been the practice to try off malpractice cases on the negligence theory, and the breach of contract count is tacitly abandoned or no serious efforts are made to push it.

4. Dr. Campbell and Dr. Arena were defended by competent counsel but a number of little things went awry in the courtroom. There were personality problems. The case was tried largely against the late Dr. Campbell. Dr. Arena also testified and, a good witness, was apparently able to smooth over some of the things that occurred during the examination and cross-examination of Dr. Campbell. It is said that Dr. Campbell's demeanor and wording did not win him any friends on the jury; as to this we can only speculate. The jury brought in a verdict of *no negligence* against defendants but did bring in a verdict against them for breach of contract. This was affirmed by the Court of Appeals. On July 7, 1971, it was affirmed by the Michigan Supreme Court, not without some attendant stir.

5. What was the "contract" that Dr. Campbell (not Dr. Arena) entered into or supposedly entered into with Mr. Guilmet? Mr. Guilmet testified that Dr. Campbell stated to him, in advance of the operation:

> "Once you have an operation it takes care of all of your troubles. You can eat as you want to, you can drink as you want to, you can go as you please. Dr. Arena and I are specialists, there is nothing to it at all—it's a very simple operation. You'll be out of work three to four weeks at the most. There is no danger at all in this operation. After the operation you can

throw away your pill box. In twenty years if you figure out what you spent for Maalox pills and doctor calls, you can buy an awful lot. Weigh it against an operation."

The Supreme Court exhibits some skepticism that this was the actual contract but this is the testimony that the jury heard and apparently believed. Even so, it is disputable as to whether this language would constitute a contract.

6. The case was heard by the Michigan Supreme Court in early May 1970 and Justice Black was assigned to write what was assumed to be a majority opinion, for *reversal.*

Justice Black did write such an opinion and then circulated it to his colleagues on the bench for the necessary endorsements. There the matter dragged for some time, for reasons that are not altogether clear. We know that two conflicting opinions were circulated, each bearing three signatures. In any event, Justice Kelly became seriously ill and ultimately died; the swing-vote endorsement was lost. In the November elections Justice Dethmers was defeated; one endorsement lost. There the Court stood, with five ongoing members. Due to the deadlock, an order was entered on November 30, 1970 for a rehearing, thus eliminating, as we have noted, two Justices who participated in the initial "decision."

7. Two new Justices entered the Supreme Court at the beginning of January 1971, Williams and Swainson. The Guilmet case was reheard sometime prior to January 9th. Three different opinions were written as of that date, a majority opinion by Justice T. G. Kavanagh, a concurring opinion by Justice Brennan, and a dissent by Justice Black. Again, internal problems apparently held up the publishing of these decisions until July 7, 1971, at which date the 6-to-1 decision (really 5-1-1) became public. A rehearing and seemingly quick decision in January with two new Justices who may not have been overly familiar with the case, resulted in a change in the outcome of this decision from a majority in favor of reversal to a 6-to-1 majority in favor of affirming!! Obviously, justice is not beyond considerations of individual health and politics.

8. Fortune does not seem to have smiled upon the defense of this case at any point. Apparently the jury did not receive a favorable impression of Dr. Campbell or his defense. Why Dr. Arena was tagged also is not clear. The Supreme Court either did not consider poor Dr. Arena's tag-along problem or else it felt that Campbell and Arena were a partnership, bound by Dr. Campbell's "contract."

9. The majority opinion has taken a bad factual case and made a bad decision, taking refuge behind the time-honored stratagem of refusing to look beyond the jury's supposed finding. The concurring opinion, countersigned also by two of the Judges who are of the main opinion, goes off on technicalities as to the pleadings and what the jury really meant by its verdict. That opinion is not relevant to this chronological review. In the last analysis, Justice Black's somewhat prolix dissent is the correct view.

10. The decision is indeed a bad one but it does not, as many seem to think, constitute a new legal principle. It has long been the law in Michigan that a doctor can be sued for breach of contract just as anyone else can be so sued and, as previously noted, many Michigan malpractice cases have been so pleaded, even though not many have been so decided. No prior case has allowed a jury to alchemize such words of reassurance into a contract to cure. We fear that any Michigan "malpractice" case, pleaded also as a breach of contract, can now go to the jury without expert testimony. So, a principle of long standing has been, we think, erroneously utilized.

11. If the case does not stand for any earth-shaking new principle, it does however suggest that doctors will have to exercise even more caution than heretofore in what they tell patients concerning the course of treatment and the probable results. Perhaps we will suffer from a rash of such contract suits; any plaintiff can get on the stand and interpret words, stretching them into a purported oral contract. Doctors will need to be vigilant; they may need witnesses to key conversations or explicit contractual forms to be signed by both parties. In the line of remedial legislation, it has been suggested that all contracts between patient and doctor should be in writing to be enforceable, as is the law in certain other limited subject areas.

12. For the present, the near panic that we listened to in the late Summer is inappropriate; common sense, caution and careful communication are the alliterative orders of the day.

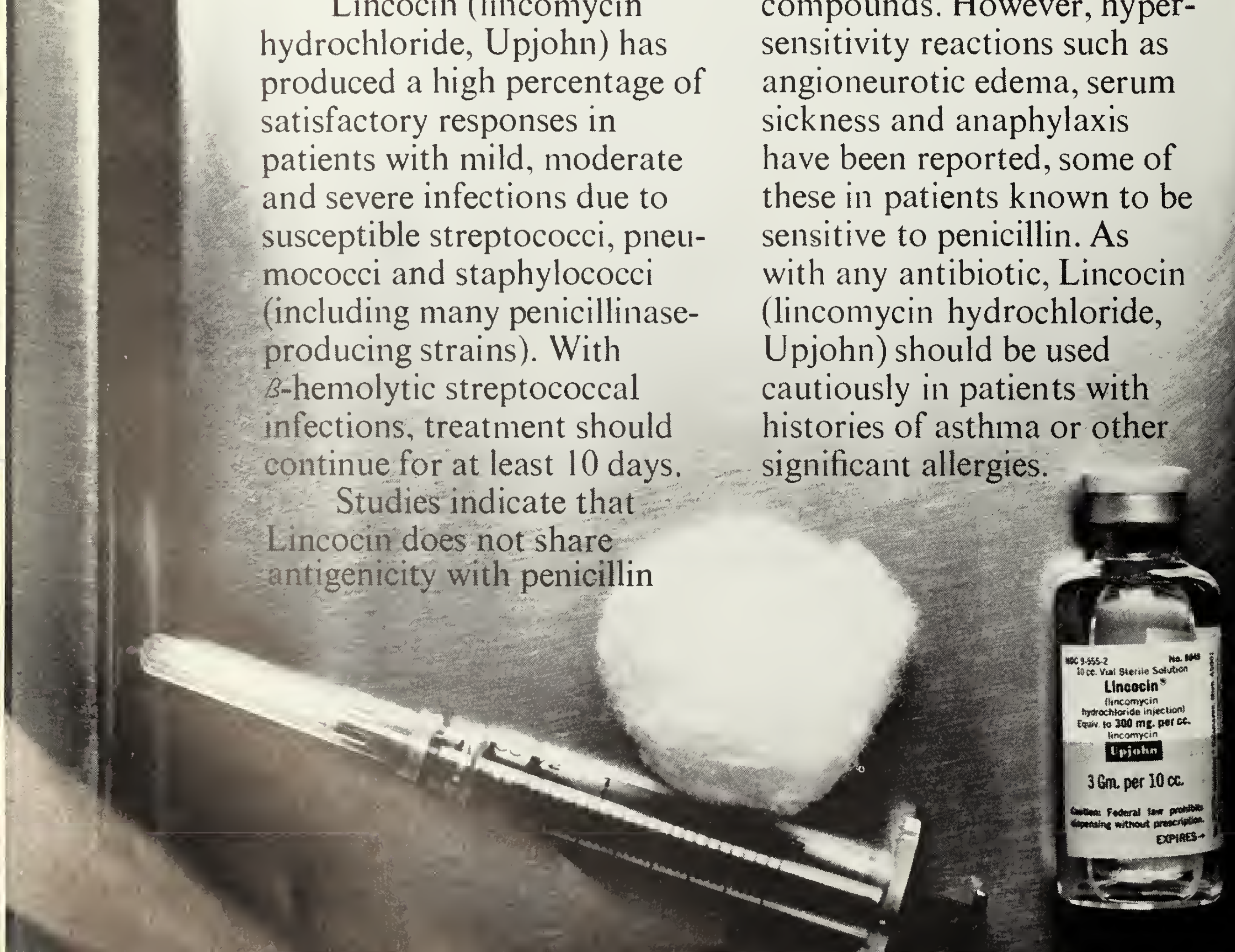
13. Doctor, if you are unhappy about this decision, what about poor Dr. Arena?

Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With β-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.


NDC 9-555-2
No. 5049
10 cc. Vial Sterile Solution
Lincocin®
(lincomycin hydrochloride injection)
Equiv. to 300 mg. per cc. lincomycin
Upjohn
3 Gm. per 10 cc.
Caution: Federal law prohibits dispensing without prescription.
EXPIRES→

So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn)

NDC 9-555-2
10 cc. Vial Sterile Solution
Lincocin®
(lincomycin hydrochloride injection)
Equiv. to 300 mg. per cc. lincomycin
Upjohn
3 Gm. per 10 cc.
Caution: Federal law prohibits dispensing without prescription.
EXPIRES→

© 1971 The Upjohn Company

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococc

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration If 4.0 grams or more administered I.V. dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Loca reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 25 to 500 ml. of 5% glucose in distilled water or normal saline has produced n local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 an 10 ml. vials and 2 ml. syringe.

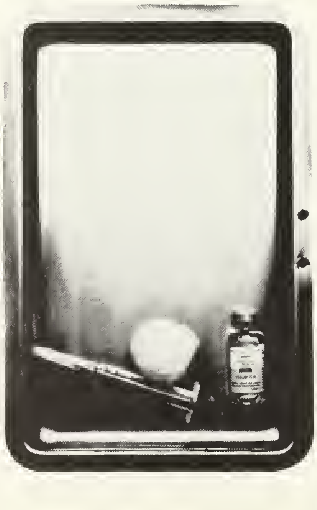
Syrup, 250 mg. per 5 ml.—60 ml. and pin bottles.

For additional product information, consult the package insert or see your Upjoh representative.

JA71-1203 MED B-5-SR (KZL-6

The Upjohn Company
Kalamazoo
Michigan 49001

Upjohn



Mediscene

Oct. 11—Departure Day for 14-day MSMS Orient Adventure; contact: Miss Helen Schulte, MSMS Headquarters

Oct. 17-23—1971 Community Health Week

Oct. 12-14—"Basic Electronics for the Practice of Cardiology," three day seminar, Beaumont Hospital, Royal Oak, contact: Don Beard, Michigan Heart Association, P.O. Box LV-160, Southfield, 48076, (313) 557-9500, deadline, Sept. 27

Oct. 15—"First Annual Michigan Cardiovascular Research Forum," a presentation of 18 cardiovascular research studies, all day Friday, the Buerki Auditorium of Henry Ford Hospital, Detroit, contact: Harold Arnow, Public Information Director, Michigan Heart Association, P.O. Box LV-160, Southfield, 48076, (313) 557-9500

Oct. 20-21—Michigan TB and Respiratory Disease Association Education Meeting, Kellogg Center, East Lansing, contact: Les Harcus, Public Relations, Michigan TB and Respiratory Disease Association, 403 Seymour, Lansing

Oct. 20—Woman's Auxiliary to MSMS District IV Meeting, Holland

Oct. 21—Woman's Auxiliary to MSMS District III Meeting, Allegan

Oct. 25-29—Michigan Nurses Association Convention, Pantlind Hotel, Grand Rapids, contact: William E. Ludwig, MNA, 120 Spartan Ave., East Lansing, 48823

Oct. 26—Woman's Auxiliary to MSMS District II Meeting, Adrian

Oct. 27—Woman's Auxiliary to MSMS District I Meeting, Pontiac

Oct. 28—Woman's Auxiliary to MSMS District V Meeting, Flint

Nov. 3 and 4—The First Michigan Allied Health Postgraduate Course in Diabetes will be held at Sinai Hospital in Detroit, contact: Miss Barbara Lofquist, regional director, 6131 West Outer Drive, Detroit, 48235. Dinner meeting, Northland Inn, Nov. 3, afternoon workshop session, Nov. 4

Nov. 4-5—Harold C. Mack Symposium on Physiology and Pathology of Reproduction, Rackham Building, Detroit

Nov. 10—MSMS Council, MSMS Headquarters, East Lansing, noon to 5 p.m., contact: Warren F. Tryloff, MSMS Director, MSMS Headquarters

Nov. 28-Dec. 10—Many Michigan physicians will be attending the AMA Clinical Convention in New Orleans

Dec. 1 and 2—Detroit Trauma Day, Wayne County Medical Society Headquarters, Detroit, contact: Robert Wilson, MD, Department of Surgery, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Dec. 8—MSMS Council, MSMS Headquarters, East Lansing, 9:30 a.m., contact: Warren F. Tryloff, MSMS Director, MSMS Headquarters

Dec. 8—11th Annual Thyroid Workshop, sponsored by Thyroid Service of Wayne State University School of Medicine, Wayne County Medical Society Auditorium, Detroit; contact: Ali Abbasi, MD, Publicity Committee, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Jan. 7, 8, and 9, 1972—Michigan Allergy Society Family Winter Weekend, Shanty Creek Lodge, contact: Rudolph E. Wilhelm, MD, Michigan Allergy Society,, 751 S. Military Road, Dearborn, 48124

Jan. 25—Woman's Auxiliary to MSMS Executive Committee Meeting, MSMS Building (State Officers, Committee Chairmen, District Directors, County Presidents)

Jan. 29-30—Educational seminar and board meeting, Michigan State Medical Assistants Society, Holiday Inn, Battle Creek, contact: Patricia Voke, 196 S. Woodrow Ave., Battle Creek, 49015

March 26—Board Meeting, Michigan State Medical Assistants Society, noon, MSMS Headquarters

March 29—Muskegon Trauma Day, Holiday Inn, Muskegon, contact: Guida Annessa, MD, 205 Medical Arts Center

April 3, 1972—Annual Beaumont Lecture, Wayne County Medical Society, Detroit.

April 19—Woman's Auxiliary to MSMS Legislative Day, Olds Plaza, Lansing

April 19-20—Woman's Auxiliary to MSMS Spring Conference (following Legislative Day), Hospitality Inn, East Lansing

April 27-30—Annual Convention, Michigan State Medical Assistants Society, Holiday Inn, Crosstown Parkway, Kalamazoo, contact: Mrs. Betty Boers, 1116 Sheridan, Kalamazoo, 49001

May 22-23—Michigan Chapter Meeting and Scientific Session of the American College of Emergency Physicians, Shanty Creek, Bellaire, Michigan

June 2 and 3—Gaylord Trauma Day, Hidden Valley Otsego Ski Club, Gaylord, contact: Benjamin Henig, MD, Keyport Clinic, 308 Michigan Ave., Grayling, 49738

June 5, 6, 7—Initial Management of the Acutely Ill and Injured Patient, Ann Arbor, contact: Charles F. Frey, MD, Department of Surgery, University of Michigan Medical Center, Ann Arbor, 48104

Ef-
fic-
iency

Dicarbosil®
ANTACID

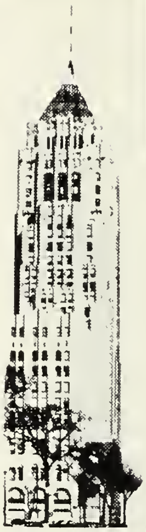
Your ulcer patients and others will confirm it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

ARCH LABORATORIES
319 South Fourth Street, St. Louis, Missouri 63102

PERFECT MAKES PRACTICE.

And "perfect" is what the Fisher Building offers a professional practice: Unmatched office facilities; indoor parking contiguous to your office; a location that's easy for you and your patients to reach from the entire metropolitan area. You're near the many specialists in the profession, as well as labs and hospitals, making internal referrals most practical for both patient and physician. Near, of course, to shops and restaurants, to a bookstore and banks and a post office, and the magnificent Fisher stage. It's an atmosphere to accomplish things in. Call us now for diagnosis and consultation on your office needs. As our patient you will find your office problems cured!

THE FISHER BUILDING
Across from General Motors Building
Detroit 48202 • Phone 874-4444



WE HELP YOU KEEP MOM IN THE PICTURE...

A Fast, Quality-Controlled Pap Screening Service Is Important

- For physicians interested in cancer prevention through quality Pap smear tests
- Over 80 years of staff experience
- Quality control with rapid service
- Attractive prices because of high volume
- Hormonal evaluation included at no extra charge

Send for your free introductory packet

Please Print
NAME ____________
ADDRESS ____________
CITY ____________
STATE ____________ ZIP ____________

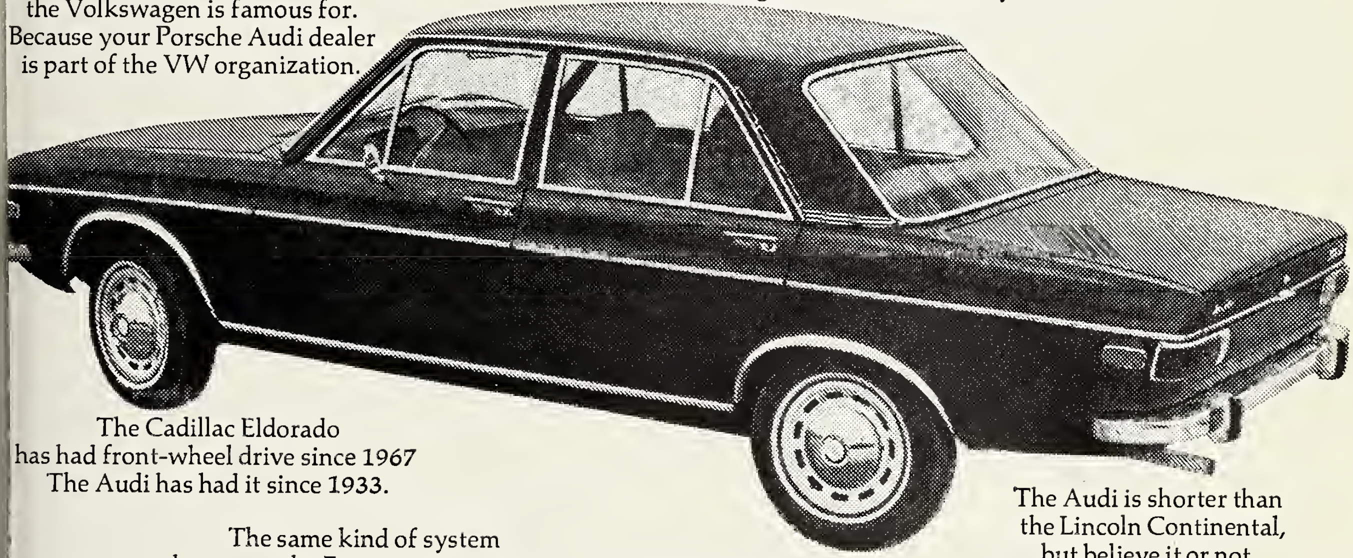
Cytology Laboratory
NATIONWIDE CANCER SCREENING SERVICE
P.O. Box 455, Corona del Mar, California 92625

TEST DRIVE 7 CARS

You can hardly
spot the difference between
the interior of the Audi
and that of the Mercedes-Benz 280SE.

The Audi gets
the same kind of expert service
the Volkswagen is famous for.
Because your Porsche Audi dealer
is part of the VW organization.

The Audi has the same
headroom and legroom as the Rolls-Royce Silver Shadow.



The Cadillac Eldorado
has had front-wheel drive since 1967
The Audi has had it since 1933.

The same kind of system
that steers the Ferrari 512 racing car,
steers the Audi.

The Porsche 917 racing car
has *inboard* disc brakes.
So does the Audi.

The Audi is shorter than
the Lincoln Continental,
but believe it or not,
it has just as much trunk space.

The Audi 100LS

PORSCHE | AUDI
a division of Volkswagen

Traverse Motors, Inc.
01 Garfield Ave., Traverse City

Tom Sullivan Porsche Audi Co.
499 S. Hunter Blvd., Birmingham

Prestige Automobiles, Inc.
2955 S. Division Ave., Grand Rapids

Williams Porsche Audi
2924 E. Grand River Ave., Lansing

Wood Imports, Inc.
15415 Gratiot Ave., Detroit

Results of State Screening Program

Unrecognized disease has been discovered in one out of ten state employees tested by high-volume, low-cost health screening in a unique group health insurance benefit authorized by the Michigan Civil Service Commission two years ago.

The mass screening program has checked 25,000 insured state employees at three permanent clinics and two mobile units, John A. Cowan, MD, retiring Medical Director of the program, said.

"One out of three employees screened had abnormal reports and were referred to physicians for examination. Based on reports from physicians, we know that at least one out of ten were actually hospitalized or placed under a physician's care."

The screening, which takes one hour, is performed by nurses and technicians with the results —both normal and abnormal—referred directly to the patient's designated private physician.

"We have state employees not only alive, but alive and working today who otherwise might not be with us at all, or hopelessly disabled, because screening referred them to a physician for treatment when disease was in the treatable stage," Doctor Cowan said. "They had serious but unrecognized medical problems, which abnormal test results and follow-up by their personal physician identified before they reached the critical stage.

"In some cases medical treatment resulted in complete recovery and in other cases it delayed progress, lessened severity of disease, and eased the residual effects. It is my conclusion that group health insurance plans of the future will include screening and other health maintenance benefits to help sort out from the healthy population those persons who don't know they are sick but who need a physician's immediate care."

Multiphasic health screening tests were developed by public health officials in the 1950's and offered in a few cities without charge on a demonstration basis. The state program was initiated in July of 1969 by the Michigan Civil Service Commission, which is the policyholder for a group health plan underwritten by the Aetna for 40,000 state classified employees. It was the first commercially underwritten plan in the nation to offer such a benefit.

In 1968 Civil Service officials in conjunction with Doctor Cowan, then Director of Adult Health for the Michigan Public Health Department, designed a method of low cost delivery of the tests, since there were no low cost private providers of screening capable of delivering the service to 40,000 state employees insured under the plan and scattered throughout all 83 counties.

Three permanent clinics in Lansing, Detroit, and Kalamazoo and one mobile unit for outstate use were established and staffed. A second mobile unit was added this year. Doctor Cowan, who had directed operation of a state and federally financed mobile screening demonstration project for the State Health Department, was hired by Civil Service.

The program currently is self-sustaining from fees billing the Aetna $24 per screen for males and $26 for females. No additional funding from the State or Department of Civil Service is required to support the program.

Tests performed other than vision and hearing include: blood samples yielding 15 different laboratory results, electrocardiogram heart tracing, blood pressure, chest X-ray, urinalysis, and for women uterine cancer tests and instruction on self-examination of the breast.

"Understandably there were sceptics both in and outside of state government as well as in the medical field who doubted we could achieve this low cost delivery of screening. We have not only established its medical value, but its practical value in terms of cost," Doctor Cowan said.

Doctor Cowan reports that results from the state employees screened "are about average for the adult population of Michigan as a whole."

Statistics analyzed on 15,517 employees screened show:

* 37.2% of those screened were women; 62.8% men.

* 32%, or 4,979 had one or more abnormal results exclusive of impaired vision and hearing.

* Likelihood of abnormal results is three times as great for persons over age 40 than those in the 18-40 age group. Women tend to have fewer abnormal results than men.

* The percentage of abnormal results was about the same for both men and women in this group, but the average age of women screened was higher.

* Over half the people with one abnormal report had two or more.

* 50% of the men had less than normal hearing acuity, but only 25% of the women had such reports.

The girth control pill

epanil® Ten-tab®

(continuous release form)

diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound upport for the weight control program you recommend. EPANIL reduces the appetite—patients enjoy food but eat ess. Weight loss is significant—gradual—yet there is a relavely low incidence of CNS stimulation.

ontraindications: Concurrently with MAO inhibitors, in patients hypersensitive to s drug; in emotionally unstable patients susceptible to drug abuse.

arning: Although generally safer than the amphetamines, use with great caution in tients with severe hypertension or severe cardiovascular disease. Do not use durg first trimester of pregnancy unless potential benefits outweigh potential risks.

dverse Reactions: Rarely severe enough to require discontinuation of therapy, uneasant symptoms with diethylpropion hydrochloride have been reported to occur relatively low incidence. As is characteristic of sympathomimetic agents, it may casionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, d jitteriness. In contrast, CNS depression has been reported. In a few epileptics increase in convulsive episodes has been reported. *Sympathomimetic cardioscular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

1-3325 (2876)

Painful night leg cramps...

unwelcome bedfellow for any patient–including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

1-3326 (2877)

Quinamm™ Specific therapy for night leg cramps

(quinine sulfate 260 mg., aminophylline 195 mg.)

Ancillary

Mack Symposium Scheduled Nov. 4-5 in Detroit

Medical research progress in the prevention and management of birth defects will be reported November 4 and 5 at a conference sponsored by Wayne State University's Department of Gynecology and Obstetrics, Harper Hospital, and The National Foundation—March of Dimes.

Theme of the Annual Harold C. Mack Symposium on the Physiology and Pathology of Reproduction is: "Birth Defects and Fetal Development: Endocrine and Metabolic Factors."

Sessions will be held at the Engineering Society of Detroit, 100 Farnsworth, Detroit.

Program chairman of the symposium is Kamran S. Moghissi, MD, professor of gynecology and obstetrics at WSU School of Medicine.

Registration and hotel information can be obtained from Gerald Bagazinski, Department of Gynecology and Obstetrics, Wayne State University School of Medicine, 540 East Canfield, Detroit, Michigan 48201.

Physician to Address Six MSPA Programs

Included among the continuing education lectures sponsored by the Michigan State Pharmaceutical Association which will be conducted as a six-day series during 1971-1972 is "Antibiotics—1971: I Need Your Help!", by Tom M. Johnson, MD, Associate Professor of Medicine, Michigan State University, College of Human Medicine. The lectures, designed to assist the practicing pharmacist by providing him with greater knowledge of modern drugs and their actions, are scheduled in Dearborn, Southfield, Saginaw, Lansing, Kalamazoo, and Grand Rapids.

Hospital Meeting Set

The Mid-America Medical Hospital Staff Conference, designed for physicians, hospital administrators, and trustees will be held at The Abbey in Fontana, Wisconsin, June 19-23. The preliminary program is available from Michael W. McManus, Executive Director, Medical Society of Milwaukee County, 756 North Milwaukee Street, Milwaukee, Wisconsin 52302.

Careers Mobile Visited Fairs, Towns in Summer

It was a busy summer for the Health Careers Mobile operated now by the Michigan Health Council. Included among the trailer's stops this summer were the Veterans' Administration Hospital, Battle Creek; the Calvin College campus, Grand Rapids; the downtown Detroit shopping area, and Michigan State University, concurrently with the 4-H Fair.

While in Battle Creek, students from all high schools in Calhoun County were invited to view the trailer's display, designed to interest persons in careers as health researchers or medical technicians.

Psychiatry Sessions Offered in Six Cities

A nine-month course in psychiatry for professional people outside the field begins this month in Grand Rapids, Jackson and Lansing. The course is sponsored by the Michigan Society of Psychiatry and Neurology.

Professional people in health, public health, nursing, teaching, social work, welfare, the ministry and other areas of involvement in services to people are eligible. The theme for 1971-72 is "Achieving Maturity: Problems of Individual Adult Growth and Development in Modern Society."

Further information may be obtained from The Michigan Society of Psychiatry and Neurology, J. J. Llinas, MD, 401 W. Greenlawn, Lansing 48933.

Seegers Receives Award

Walter H. Seegers, PhD, Grosse Pointe Farms, chairman of physiology and pharmacology at the Wayne State University School of Medicine, has been chosen as the recipient of the Alumni Faculty Service Award in recognition of his internationally known work in blood research. In over 30 years of research, Doctor Seegers has developed a theory of blood coagulation mechanisms and has also investigated isolation of related enzymes. Author of over 300 professional articles and six books, Doctor Seegers organized the first meeting of WSU's annual symposium on blood research nearly 20 years ago.

MORE ANCILLARY—SEE PAGE 952

Mead Johnson—pharmaceuticals created for your specialized clinical needs

One good K-Lyte® deserves another...

Each effervescent tablet in solution supplies 25 mEq potassium as bicarbonate and citrate

Introducing

K-LYTE®/CL

Each dose in solution supplies 25 mEq. potassium chloride

potassium supplement with chloride

The good-tasting way to treat hypokalemias induced by thiazide diuretics and other drugs...

Here, at last, is a potassium chloride supplement that just doesn't taste like one! The mixed fruit flavor of new K-Lyte/Cl is truly refreshing. Now, K-Lyte/Cl offers your patients all of the therapeutic advantages you expect from a potassium chloride supplement. And you can be sure that your patients will take the K-Lyte/Cl you prescribe—all in good taste.

Now you have a choice...

When extra chloride is not desired, original effervescent K-Lyte is unsurpassed in flavor, effective and safe in short- or long-term potassium supplementation. There is little chance of taste fatigue from K-Lyte with two delicious, effervescent flavors to alternate...fresh-tasting orange and sparkling lime.

K-Lyte® Each effervescent tablet in solution supplies 25 mEq. potassium as bicarbonate and citrate

K-Lyte®/Cl Each dose of powder in solution supplies 25 mEq. potassium chloride

Each tablet or dose must be completely dissolved before taking.
Indications: K-Lyte and K-Lyte/Cl are oral potassium supplements for therapy or prophylaxis of potassium deficiency. Particularly useful when thiazide diuretics or corticosteroids cause excessive excretory potassium losses. **Contraindications:** Impaired renal function with oliguria or azotemia; Addison's disease; hyperkalemia from any cause. **Warnings and Precautions:** Since the amount of potassium deficiency may be difficult to determine accurately, supplements should be administered with caution, and dosages adjusted to the requirements of the individual patient. Potassium intoxication rarely occurs in patients with normal kidney function. Symptoms of potassium intoxication are variable. They include listlessness, mental confusion, and tingling of the extremities. Frequent checks of the clinical status of the patient, ECG, and serum potassium level are desirable. In established hypokalemia, attention should also be directed toward other potential electrolyte disturbances. Potassium supplements should be given cautiously to digitalized patients. To minimize the possibility of gastrointestinal irritation associated with the oral ingestion of concentrated potassium salt preparations, patients should be carefully directed to dissolve each dose completely in the stated amount of water. K-Lyte/Cl contains 4.9 grams (20 calories) of sucrose per dose which should be considered for patients with restriction of caloric intake. **Adverse Reactions:** Nausea, vomiting, diarrhea, and abdominal discomfort may occur with the use of potassium salts. **Dosage and Administration:** Adults: 1 tablet or dose *completely dissolved*, 2 to 4 times daily, depending upon the requirements of the patient: K-Lyte: 1 tablet (25 mEq. potassium) in *3 to 4 ounces of cold or ice water;* K-Lyte/Cl: 1 dose (25 mEq. potassium chloride) in *6 ounces of cold or ice water.* The normal adult daily requirement is approximately 50 mEq. of elemental potassium. NOTE: *It is suggested that these products be taken with meals and sipped slowly over a 5-10 minute period.* **How Supplied:** K-Lyte: Effervescent tablets—boxes of 30 and 250 (orange or lime flavors). K-Lyte/Cl: Powder, cans of 30 measured doses with scoop (fruit-punch flavor). ℞

© 1971 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U.S.A. 181471

Mead Johnson
LABORATORIES

Mack Symposium Scheduled Nov. 4-5 in Detroit

Medical research progress in the prevention and management of birth defects will be reported November 4 and 5 at a conference sponsored by Wayne State University's Department of Gynecology and Obstetrics, Harper Hospital, and The National Foundation—March of Dimes.

Theme of the Annual Harold C. Mack Symposium on the Physiology and Pathology of Reproduction is: "Birth Defects and Fetal Development: Endocrine and Metabolic Factors."

Sessions will be held at the Engineering Society of Detroit, 100 Farnsworth, Detroit.

Program chairman of the symposium is Kamran S. Moghissi, MD, professor of gynecology and obstetrics at WSU School of Medicine.

Registration and hotel information can be obtained from Gerald Bagazinski, Department of Gynecology and Obstetrics, Wayne State University School of Medicine, 540 East Canfield, Detroit, Michigan 48201.

Physician to Address Six MSPA Programs

Included among the continuing education lectures sponsored by the Michigan State Pharmaceutical Association which will be conducted as a six-day series during 1971-1972 is "Antibiotics—1971: I Need Your Help!", by Tom M. Johnson, MD, Associate Professor of Medicine, Michigan State University, College of Human Medicine. The lectures, designed to assist the practicing pharmacist by providing him with greater knowledge of modern drugs and their actions, are scheduled in Dearborn, Southfield, Saginaw, Lansing, Kalamazoo, and Grand Rapids.

Hospital Meeting Set

The Mid-America Medical Hospital Staff Conference, designed for physicians, hospital administrators, and trustees will be held at The Abbey in Fontana, Wisconsin, June 19-23. The preliminary program is available from Michael W. McManus, Executive Director, Medical Society of Milwaukee County, 756 North Milwaukee Street, Milwaukee, Wisconsin 52302.

Careers Mobile Visited Fairs, Towns in Summer

It was a busy summer for the Health Careers Mobile operated now by the Michigan Health Council. Included among the trailer's stops this summer were the Veterans' Administration Hospital, Battle Creek; the Calvin College campus, Grand Rapids; the downtown Detroit shopping area, and Michigan State University, concurrently with the 4-H Fair.

While in Battle Creek, students from all high schools in Calhoun County were invited to view the trailer's display, designed to interest persons in careers as health researchers or medical technicians.

Psychiatry Sessions Offered in Six Cities

A nine-month course in psychiatry for professional people outside the field begins this month in Grand Rapids, Jackson and Lansing. The course is sponsored by the Michigan Society of Psychiatry and Neurology.

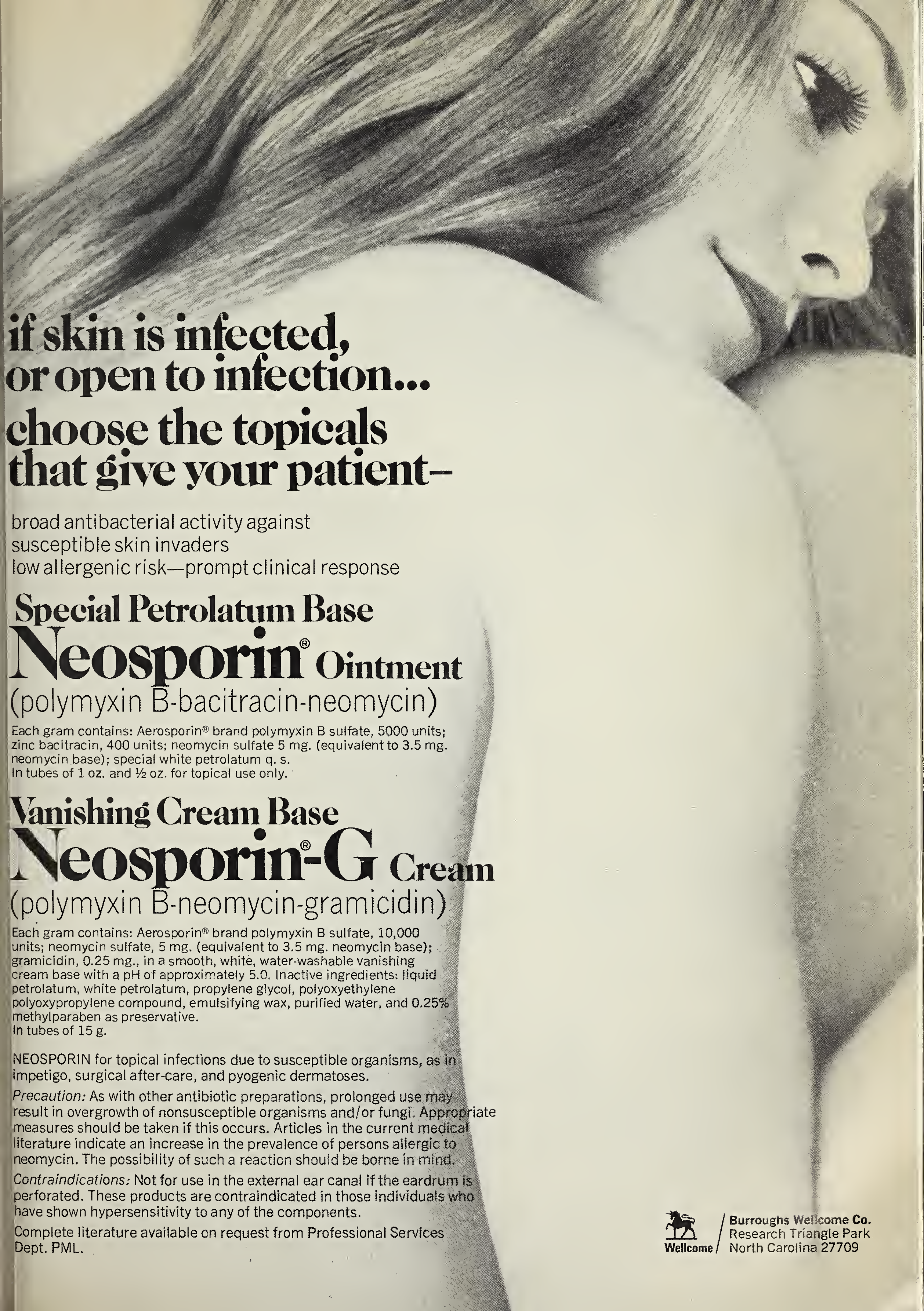
Professional people in health, public health, nursing, teaching, social work, welfare, the ministry and other areas of involvement in services to people are eligible. The theme for 1971-72 is "Achieving Maturity: Problems of Individual Adult Growth and Development in Modern Society."

Further information may be obtained from The Michigan Society of Psychiatry and Neurology, J. J. Llinas, MD, 401 W. Greenlawn, Lansing, 48933.

Seegers Receives Award

Walter H. Seegers, PhD, Grosse Pointe Farms, chairman of physiology and pharmacology at the Wayne State University School of Medicine, has been chosen as the recipient of the Alumni Faculty Service Award in recognition of his internationally known work in blood research. In over 30 years of research, Doctor Seegers has developed a theory of blood coagulation mechanisms and has also investigated isolation of related enzymes. Author of over 300 professional articles and six books, Doctor Seegers organized the first meeting of WSU's annual symposium on blood research nearly 20 years ago.

MORE ANCILLARY—SEE PAGE 963



if skin is infected, or open to infection... choose the topicals that give your patient–

broad antibacterial activity against
susceptible skin invaders
low allergenic risk—prompt clinical response

Special Petrolatum Base
Neosporin® Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base
Neosporin®-G Cream
(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

When irritable colon feels like this

in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED**® provides more complete relief:

☐ **belladonna alkaloids—for the hyperactive bowel**
☐ **simethicone—for accompanying distension and pain due to gas**
☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®
antispasmodic/sedative/antiflatulent

peeper (tree frog, *Hyla crucifer*):
all amphibian can expand
at membrane with air until it is
he size of its head.

ECONOMIST OUTLINES ALTERNATIVES FOR ATTACKING HEALTH PROBLEMS

By Clyde T. Hardwick, PhD
Economic Consultant to MSMS

Nature of Issue

It is obvious to all thinking and alive Americans that these are interesting times with uncertainty, unsolved problems, conflicts, accusations and unfilled promises as well as prosperity, opportunity and rewards for many. The central question seems to be "are there any basic causes for these troubles or any available guidelines for happiness and success?" This presentation will suggest an attack on the central questions with some constructive suggestions. At the present time, aspirations for good life are high and widespread. A determined and affluent society should be able to discover better ways to raise the quality of living for Americans.

Economic Man vs. Social Man

The central conflict revolves around the goods and values of economic man versus social man. Both of them see the same problems from opposite points of view.

The economic man sees the world as a place to struggle and compete in production and consumption of material things. He aims for growth and development for individuals and nations. He embraces technology and science to provide for the material welfare in housing, transportation, food and even leisure with boots, cameras and skiing equipment. He assumes people have unlimited wants and society must work hard to satisfy the selected wants of people. Producers must be free to realize the things people are willing to pay for in the market place. Economic man applies no moral sanctions of good or bad to wants (example —if people want to take the chance on smoking he will manufacture cigarettes to sell. In general it is a good society if the producers can satisfy more and different wants for more people. A bad society is one that can not satisfy the wants of man.

In contrast social man sees the good life differently than economic man. That is, social man will campaign to redistribute the slices of the economic pie so that poor people will benefit. Thus, social man will nearly always attack a value system as to goals, priorities and distribution of economic wealth.

In order to achieve the goods of social engineering, the economy and environment as well as sciences and technology have to come under the control of someone other than the economic man. Therefore the social man seeks the assistance of the government or super state as the agent of social control. For example, since science and technology have caused pollution, government standards must be established to save our environment.

Furthermore, for a long time social man sees education as a public responsibility, especially for financing. And, recently, health care is put in a similar category by saying all citizens have a right to the best health care without passing the economic test of paying for such services.

Health and Medical Issues

The health care field is a recent battle place for the confrontation of economic and social man. Historically the providers of health care operated in the free market place where individuals purchased and paid for health services. The economic man developed new equipment, new drugs, and new facilities directly in proportion to the subscribers' willingness to pay. In America, physicians traditionally provided medical services on a fee for service basis, when the private market included people who could not pay, the costs were written off as bad debts. Then about thirty years ago, the third party—insurance companies—came into the health field such as Blue Cross and Blue Shield to underwrite medical costs on an annual premium basis. Economic man supports any system in which payment for a service was working out a relationship between supply and demand. On the other hand, social man has been contending the distribution of health services on an economic basis is too rigid and neglects many unfilled health needs.

Thus, social man would like to make all health services available to all who need it without economic test of fee for services. Social man has a firm belief in big social planning schemes spearheaded by big government. Economic man tends to believe in decentralized planning by individuals or small groups or institutional corporations responsible for production and distribution in the open and preferred local market place.

Therefore, professional providers of health care are in a dilemma as to what route to follow. In general, responsible professional personnel in the health field agree with social man that everybody has the right to the services assuring good health. At the same time, professional health personnel and facilities cost money which must be secured from some economic source. If the old distribution system of fee for service is not working, some other economic system of pricing will have to be developed. This is where we are now—what kind of system will satisfy both the economic and social goals?

Guidelines for Attacking Health Problems

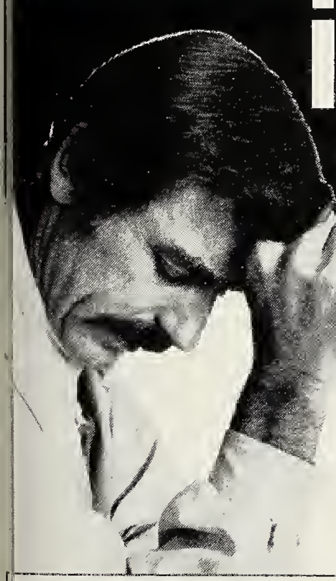
In terms of pragmatic theory, three courses of action seem to be available to contemporary America.

Course Number 1 would be to continue the present system based primarily on the tenets of economic man. That is, keep health service in the private segment including private insurance and payment for services.

Course Number 2 would be to take the health services out of the private market place and please social man with the responsibility resting on the shoulders of government for distribution and payments.

Course Number 3 would be to develop a better working mixture of private and public responsibilities for payment and distribution of health services. This means that whenever possible private payment would be the rule and, for example, government could provide funds via private insurance to cover those unable to pay.

Obviously, Course Number 3 would provide a means of redistribution of health services without a complete surrender to government operation and control. If course 3 is worked out in the health field, we could still maintain personal incentives, personal responsibilities and a reasonable reward system as well as negotiation of fees and peer review. Therefore Course Number 3 calls for realistic input by physicians, hospitals, health planning agencies and government. Such involvement and cooperation seems to be the American way.



The treatment of
impotence
due to androgenic deficiency in the American male.
The concept of chemotherapy plus the
physician's psychological support is confirmed
as effective therapy.

NEW CLINICAL STUDY

The Treatment of Impotence
with Methyltestosterone Thyroid
(100 patients—Double Blind Study)
T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the
American Fertility Society

Android®
(thyroid-androgen) tablets

Double-Blind Study and Type of Patient:
100 patients suffering from impotence. Of the patients receiving the active medication (Android) a favourable response was seen in 78%. This compares with 40% on placebo. Although psychotherapy is indicated in patients suffering from functional impotence the concomitant role of chemotherapy (Android) cannot be disputed.

Choice of 4 strengths:

Android
ach yellow tablet contains:
ethyl Testosterone ..2.5 mg.
hyroid Ext. (1/6 gr.) ..10 mg.
lutamic Acid ....50 mg.
hiamine HCL ....10 mg.
ose: 1 tablet 3 times daily.
vailable:
ottles of 100, 500, 1000.

REFER TO PDR

Android-HP
HIGH POTENCY
Each red tablet contains:
Methyl Testosterone ..5.0 mg.
Thyroid Ext. (½ gr.) ...30 mg.
Glutamic Acid ....50 mg.
Thiamine HCL ....10 mg.
Dose: 1 tablet 3 times daily.
Available:
Bottles of 100, 500, 1000.

Android-X
EXTRA HIGH POTENCY
Each orange tablet contains:
Methyl Testosterone .12.5 mg.
Thyroid Ext. (1 gr.) ....64 mg.
Glutamic Acid ....50 mg.
Thiamine HCL ....10 mg.
Dose: 1 or 2 tablets daily.
Available:
Bottles of 60, 500.

Android-Plus
WITH HIGH POTENCY
B-COMPLEX AND VITAMIN C
Each white tablet contains:
Methyl Testosterone ..2.5 mg.
Thyroid Ext. (¼ gr.) ...15 mg.
Ascorbic Acid (Vit. C) .250 mg.
Thiamine HCL ....25 mg.
Glutamic Acid ....100 mg.
Pyridoxine HCL ....5 mg.
Niacinamide ....75 mg.
Calcium Pantothenate .10 mg.
Vitamin B-12 ....2.5 mcg.
Riboflavin ....5 mg.
Dose: 2 tablets daily.
Available: Bottles of 60, 500.

Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. **Montesano, P., and Evangelista, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

te for literature and samples: BROWN THE BROWN PHARMACEUTICAL CO., INC. 2500 West 6th Street, Los Angeles, California 90057

now...

for the stable adult diabetic who needs higher doses of a reliable oral hypoglycemic...

new

DBI®-TD 100 mg.

(phenformin HCl)

timed-disintegration capsules

- a higher dosage strength for use in the overweight, maturity-onset diabetic if diet alone fails
- a biguanide... not a sulfonylurea
- new dosage flexibility
- low patient cost

new DBI®-TD 100 mg.

(phenformin HCl)

timed-disintegration capsules

lowers elevated blood sugar

Secondary to its blood sugar lowering effect, DBI-TD probably decreases insulin oversecretion and thus may help reduce lipogenesis and facilitate lipolysis. This may account for the clinically reported reduction in weight and lowering of serum cholesterol levels in the overweight and hypercholesteremic diabetic patient.

usually well tolerated

Mainly gastrointestinal side effects may occur. However, as with many drugs, you should keep in mind that higher dosages may increase the incidence. Hypoglycemic reactions are rare when DBI-TD is used alone.

to prescribe DBI®-TD (phenformin HCl) if diet alone fails specify

DBI-TD 50 mg. for the newly diagnosed overweight, stable adult diabetic

DBI-TD 100 mg. for the overweight, adult-onset diabetic who needs higher doses of a reliable oral hypoglycemic

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary. **Contraindications:** Diabetes mellitus that can be regulated by diet alone; juvenile diabetes that is uncomplicated and well regulated on insulin; acute complications of diabetes (metabolic acidosis, coma, infection, gangrene); surgery; severe hepatic disease; renal disease with uremia; cardiovascular collapse, after disease states associated with hypoxemia. **Warning:** Use during pregnancy is to be avoided. Until adequate data on the effects of DBI on the human fetus are available, such use can be considered experimental. **Precautions: Starvation Ketosis,** which must be differentiated from "insulin lack" ketosis, and is characterized by ketonuria in spite of relatively normal blood and urine sugar, may result from excessive DBI therapy, excessive insulin reduction or insufficient carbohydrate intake. Adjustment of DBI-TD or insulin dosage, or supplying carbohydrates, alleviates this state. DO NOT GIVE INSULIN WITHOUT FIRST CHECKING BLOOD AND URINE SUGARS. **Lactic Acidosis:** DBI is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, it is recommended that periodic determinations of ketones in the blood and urine be made in diabetics previously stabilized on DBI, or DBI and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH and the lactate-pyruvate ratio. DBI should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis. **Hypoglycemia:** Although hypoglycemic reactions are rare when DBI is used alone, every precaution should be observed during the dosage adjustment period, particularly when insulin or a sulfonylurea has been given in combination with DBI. **Adverse Reactions:** Principally gastrointestinal, occurring more often at higher dosage levels; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, DBI should be immediately withdrawn. Although rare, urticaria and gastrointestinal symptoms following excessive alcohol intake have been reported. **Dosage:** 25 mg.-300 mg. daily. **How Supplied:** 50 mg. timed-disintegration capsules, bottles of 100 and 1000; 100 mg. timed-disintegration capsules, bottles of 100 and 500. **Also Available:** DBI tablets 25 mg., bottles of 100 and 1000.

USV PHARMACEUTICAL CORP., Tuckahoe, New York 10707

USV

You don't build a medical building, or a hospital, a group practice clinic or extended care facility without a particular kind of expertise.

We aren't doctors or hospital administrators, or social scientists, but if you were to take a survey of the various kinds of knowledge and experience our staff can bring to bear on a health facility building project or problem, we think you'd be quite impressed with the range and depth.

Our expertise is in getting your project off the planning board, completed, occupied and operative.

From conceptual planning, site selection, zoning approval and purchase—to architectural design, engineering, construction, equipment specifications, and project management—we can provide the savvy and efficiency, the contacts and help with the arrangements for financing, to speed your project—even where federal or local requirements or funding are part of the picture.

Whatever the stage of your current or proposed medical building, you've nothing to lose and perhaps a great deal to gain by talking it over with us.

Write or call us collect. You'll find us interested, communicative and helpful.

INLAND STEEL DEVELOPMENT CORP.

A Subsidiary of Inland Steel Urban Development Corp.
315 West Gortham Street, Madison, Wisconsin 53703 Phone (608) 257-5675

About doctors

John Barrett, MD, Royal Oak

was honored by the intern class of Beaumont Hospital with the third annual "Teacher of the Year Award" at Beaumont's first Convocation in June. Doctor Barrett, senior attending surgeon and former chief of the Department of Surgery, was cited by his students for his "personal attention."

John M. Dorsey, MD, Highland Park,

was awarded an honorary Doctor of Laws degree from the Detroit College of Law at the 1971 commencement exercises. Also the keynote speaker, Doctor Dorsey spoke on "Psychiatry and the Law." Doctor Dorsey, who retired July 1, was a University Professor at Wayne State University and had been a member of the University faculty for more than 30 years.

A. C. Stander, MD, Saginaw,

recently was named to the Saginaw County Mental Health Board. Until recently a Councilor for MSMS, Doctor Stander is president-elect of the Saginaw County Medical Society.

Jack Stack, MD, Alma,

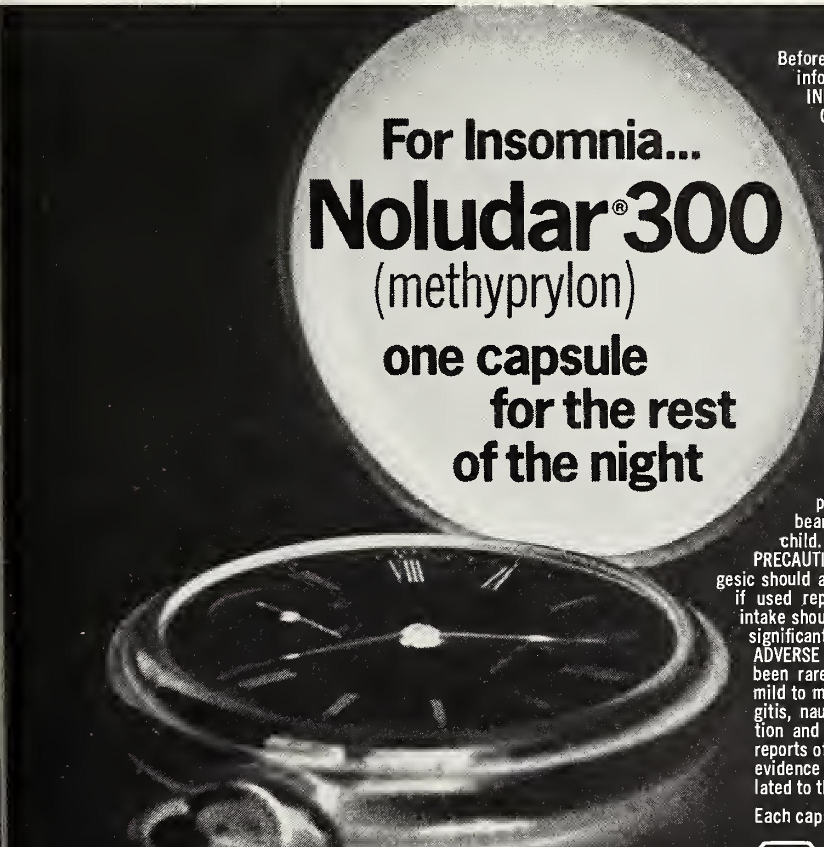
has been reappointed by Governor Milliken to the State Advisory Council on Mental Health Services.

John F. Burton, MD, Pontiac,

has been appointed by the College of American Pathologists as one of a 15-member staff of full-time medical examiners to conduct seminars on forensic pathology during the next 30 months throughout the United States. Doctor Burton is chief medical examiner for Oakland County.

Ennis H. Corley, MD, Jackson,

after 42 years of practice, has said goodbye to his Jackson patients. Doctor Corley interned at Detroit's Harper Hospital, and established his practice in Jackson in 1929.



Before prescribing, please consult complete product information, a summary of which follows:
INDICATION: Relief of insomnia of varied etiology.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.
Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

ROCHE
ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

when manhood ebbs... or is delayed due to testicular hormonal insufficiency

What nature denies, Halotestin may replace. That's the purpose of this orally active androgen in conditions such as impotency, eunuchoidism, and eunuchism. The most widely used agent of its kind, Halotestin is replacement therapy with approximately five times the potency of oral methyltestosterone. And, at its recommended daily dosage of 2 to 10 mg., Halotestin is economical as well as convenient. Of course, you will want to employ androgens carefully in young boys to avoid premature epiphyseal closure... and in the elderly where possible sodium retention may, minimally, precipitate edema. Tablets of 2, 5, and 10 mg.

Halotestin® 5 mg. tablets

[fluoxymesterone Upjohn]

oral replacement with parenteral-like potency

Please see facing column for summary of contraindications, precautions, and adverse reactions.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Halotestin®
(fluoxymesterone, Upjohn)

Orally active androgen about 5 times as potent in anabolic and androgenic activity as methyltestosterone. Halotestin (fluoxymesterone) induces significant retention of calcium and potassium, but retention of sodium not marked. Doses below 20 mg. daily have little effect in producing creatinuria.
Indications *Male:* Replacement therapy in testicular hormone deficiency states. Prevents atrophy of the accessory male sex organs following castration for as long as therapy is continued. Impotence and male climacteric symptoms when due to androgen deficiency. Primary eunuchoidism and eunuchism. Delayed puberty when established as not a simple familial trait. Indicated for those symptoms of panhypopituitarism related to hypogonadism, however, appropriate adrenal cortical and thyroid hormone replacement therapy remain of primary importance. *Female:* Palliation of androgen-responsive, advanced, inoperable breast cancer in women between 1 and 5 years postmenopausal or women in whom castration has shown the tumor to be hormone dependent. Prevention of postpartum breast manifestations of pain and engorgement; there is no satisfactory evidence that this drug prevents or suppresses lactation per se. In osteoporosis androgens may be of adjunctive value to adequate considerations of diet, calcium balance, physiotherapy and general health promoting measures. *Males and Females:* In the treatment of protein depletion states which occur in geriatric patients, in debilitation states, in chronic corticoid therapy, resistant fractures; cryptorchidism; creating a positive nitrogen balance, tissue repair and other anabolic effects. Androgenic steroids may produce a response in aplastic anemias, myelofibrosis, myelosclerosis, agnogenic myeloid metaplasia and hypoplastic anemias due to malignancy or myelotoxic drugs. Androgens are not of value in other anemias.
Contraindications Pregnancy (may virilize female fetus), mammary carcinoma in the male, prostatic carcinoma, severe liver disease, severe cardiorenal disease and severe persistent hypercalcemia.
Precautions Employ with caution in young boys to avoid precocious sexual development and premature epiphyseal closure. Androgens tend to promote retention of sodium and water, therefore, watch for edema—particularly in the elderly. Incidence and severity of edema have been minimal and have been associated only with high doses used for palliation of breast cancer. Hypercalcemia may occur, particularly in patients with metastatic breast carcinoma; if this occurs the drug should be discontinued. Changes in liver function tests, such as increased BSP retention and SGOT levels, can occur during therapy. Jaundice has been rarely reported. If liver function tests are altered, discontinue medication or reduce dose. Priapism is indicative of excessive dosage and is indication for temporary withdrawal of drug. When treating protein depletion states or osteoporosis, an adequate diet should be provided and prolonged immobilization avoided whenever possible. When treating aplastic or hypoplastic anemias, androgen therapy should not replace other measure such as transfusion, correction of iron deficiency, antibacterial therapy, and the use of corticosteroids.
Adverse reactions Nausea, dyspepsia, menstrual irregularities, hepatic dysfunction, priapism, edema, precocious sexual development, and premature epiphyseal closure in young patients have been reported. *Male*—Prolonged administration or excessive dose may cause inhibition of testicular function with oligospermia and decreased ejaculation volume. *Female*—Large doses or prolonged administration may produce masculinization with signs such as hirsutism, deepening of the voice, enlargement of the clitoris, acne, and sometimes, increased libido.
Supplied *Tablets: 2 mg.*, scored—bottles of 100./*5 mg.*, scored—bottles of 50./*10 mg.*, scored—bottles of 50.
For additional product information, see your Upjohn representative or consult the package circular.

Upjohn The Upjohn Company, Kalamazoo, Michigan
JA68-7627-R MED 8-5-S (LQX)

Herrick Foundation Helps Ann Arbor Hospital

The Herrick Foundation of Detroit has made a generous donation to St. Joseph Mercy Hospital, Ann Arbor, for the construction of a new cardiac special studies facility within the hospital and for necessary, sophisticated cardiology equipment.

Rudolph E. Reichert, Jr., MD, chief of staff, states, "This donation will allow the Cardiology Unit to meet its obligations of diagnosing and treating patients with coronary artery disease and the unit will help to attract some doctors for special teaching and research."

WSU, Children's Hospital Name Joint Appointee

Alan D. Perlmutter, MD, formerly Assistant Clinical Professor of Surgery at Harvard Medical School, has been appointed professor of urology at the Wayne State University School of Medicine, and chief of pediatric urology at Children's Hospital of Michigan. T. N. Evans, MD, Acting Dean of the WSU medical school and Hugo V. Hullerman, MD, Executive Vice President of Children's Hospital recently announced the joint appointment.

Doctor Perlmutter's previous positions included associate in surgery and director of the Urology Clinic at Children's Hospital Medical Center, Boston, and associate in surgery (urology) at Peter Bent Brigham Hospital.

UP Annual Meeting Drew Many to Houghton

The 76th Annual Meeting of the Upper Peninsula Medical Society took place in Houghton June 24-26, with the main events held in the Michigan Tech Memorial Union. Henry J. Winkler, MD, president of the Houghton-Baraga-Keweenaw Medical Society and the Upper Peninsula Medical Society, presented the welcoming address. Highlighting the activities was a presentation by J. D. Farrington, MD, Minocqua, Wisconsin, on organization and training of ambulance attendants. Robert Hamburg of the Michigan Medical Service offered additional remarks. It is known that the Copper Country has one of the best ambulance services in the state, with David H. Gilbert, MD, responsible for the training of the unit. Also included in the meeting's events were bus tours to Copper Harbor and to points of area interest.

Miltown®
(meprobamate)

Still serving...

Miltown®
(meprobamate)

WALLACE PHARMACEUTICALS
Cranbury, N.J. 08512

Medicolegal

The AMA's *Citation* newsletter, prepared by the AMA Law Department, lists the following cases involving health personnel in Michigan. Persons interested in obtaining more information on individual cases may write MSMS Headquarters.

"Non-profit hospital residencies
for physicians held tax-exempt"
Michigan Court of Appeals, May 27, 1970
from the *Citation,* Vol. 22, No. 11

"Failure to diagnose head injury"
Michigan Court of Appeals, April 24, 1970
leave to appeal denied June 28, 1970
from the *Citation,* Vol. 22, No. 10

"Recovery for Emotional Disturbances
permitted in No-Impact Case"
Michigan Superior Court, Sept. 22, 1970
from the *Citation,* Vol. 22, No. 10

"Alleged Sexual Psychopath
Entitled to Treatment"
Michigan Court of Appeals, Feb. 23, 1970
from the *Citation,* Vol. 23, No. 1

"Rights of Criminal Sexual
Psychopath Not Violated"
District Court of Michigan, April 7, 1970
from the *Citation,* Vol. 23, No. 1

Single Residence Restriction
Prevents Treatment Of Patients
Michigan Court of Appeals, Dec. 2, 1970
from the June 15, 1971 *Citation*

Commitment of Criminally Insane
To Mental Hospital
—Commitment Improper
After "Not Guilty" Verdict
Michigan Court of Appeals, March 24, 1970
from the Sept. 1, 1971 *Citation*

Right To Release
From Mental Hospital
—Patient May Contest Convalescent Status
By Habeas Corpus Petition
Michigan Court of Appeals, November 26, 1969
from the Sept. 1, 1971 *Citation*

WHEN TRAUMA
RESULTS IN PAIN...
is photograph
no way implies
endorsement
Norgesic
Joe Namath

orgesic . . . provides effective analgesia and relief of associated muscle spasm

Contraindications: Because of the mild anticholinergic effect of orphenadrine, Norgesic should not be used in patients with glaucoma, pyloric or duodenal obstruction, achalasia, prostatic hypertrophy or obstructions at the bladder neck. Norgesic is also contraindicated in patients with myasthenia gravis and in patients known to be sensitive to aspirin, phenacetin or caffeine.
Since mental confusion, anxiety and tremors have been reported in patients receiving orphenadrine and propoxyphene concurrently, it is recommended that Norgesic not be given in combination with propoxyphene (Darvon®).
Warnings: USE IN PREGNANCY: Since safety of the use of this preparation in pregnancy, during lactation, or in the child-bearing age has not been established, use of the drug in such patients requires that the potential benefits of the drug be weighed against its possible hazard to the mother and child.
USE IN CHILDREN: The safe and effective use of this drug in children has not been established; therefore, the physician must weigh the benefits against the potential hazards.
Precautions: It has been reported that prolonged or excessive use of phenacetin may result in nephrotoxicity. Caution, therefore, should be exercised when Norgesic is administered to patients with renal disorders. It should also be used with caution in patients with tachycardia.
Adverse Reactions: Side effects of Norgesic are those seen with APC or those usually associated with mild anticholinergic agents. These may include tachycardia, palpitation, urinary hesitancy or retention, dry mouth, blurred vision, dilatation of the pupil, increased intraocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, and rarely, urticaria and other dermatoses. Infrequently an elderly patient may experience some degree of confusion. Mild central excitation and occasional hallucinations may be observed. These mild side effects can usually be eliminated by reduction in dosage. One case of aplastic anemia associated with the use of Norgesic has been reported. No causal relationship has been established. **Dosage and Administration:** Adults—1 to 2 tablets 3 to 4 times daily.

Riker Laboratories, Inc.
NORTHRIDGE, CALIFORNIA 91324

A SUBSIDIARY OF 3M COMPANY

NORGESIC®
(orphenadrine citrate, 25 mg., aspirin, 225 mg., phenacetin, 160 mg., caffeine, 30 mg.)

the versatile analgesic

HEW Grants Announced for Medical Schools

Harry W. Bruce, Jr., MD, Director, Division of Physician and Health Professions Education, Bureau of Health Manpower, a component of HEW's National Institutes of Health, reports that federal funds totaling almost $40,500,000 were allocated for the 1971-1972 school year to health professions schools throughout the country for scholarship and loan assistance to students.

The awards help students pursue courses of study in medicine, dentistry, osteopathy, optometry, pharmacy, podiatry, and veterinary medicine.

Under the Health Professions Educational Assistance Act of 1968, students may obtain loans up to $2,500 for an academic year or scholarships up to $2,500 for a 12-month period. Schools participating in the program select the scholarship and loan recipients and determine the amounts to be received under the guidelines set by NIH.

The following figures represent a breakdown of the federal funds allocated to Michigan's three medical schools during the school years 1970-71 and 1971-72 by the Division of Physician and Health Professions Education, Bureau of Health Manpower Education, a component of HEW's National Institutes of Health. The awards are made in accordance with the Health Professions Educational Assistance Act of 1968.

1970-71		1971-72	
U-M Medical School, Ann Arbor		U-M Medical School, Ann Arbor	
Loans:	$289,484	Loans:	$282,268
Scholarships:	$151,230	Scholarships:	$144,609
WSU School of Medicine, Detroit		WSU School of Medicine, Detroit	
Loans:	$186,019	Loans:	$177,300
Scholarships:	$85,000	Scholarships:	$110,779
MSU College of Human Medicine		MSU College of Human Medicine	
Loans:	$31,517	Loans:	$59,236
Scholarships:	$16,465	Scholarships:	$30,348

MMS-MHS, MHC, OTHERS PROVIDE SUMMER PROJECT

Nearly 100 black and chicano inner-city high school students and their parents were honored recently at special graduation ceremonies at the new Michigan Blue Cross-Blue Shield building.

All of the students, eventually expected to enter health careers, were participants in the Third Annual Summer Exploratory Experience in Health Occupations program. Among the many institutions visited by the students were hospitals, medical schools, dental and veterinary schools, and health laboratories throughout the Detroit and Ann Arbor areas. The students were enabled to view health careers firsthand and assisted health personnel while acquiring experience which should equip them for medical futures.

Among those invited was Mayor Roman Gribbs, as well as medical personnel who have assisted in the 1971 program. Herman Glass, Commissioner of Hospitals, City of Detroit, was the principal speaker at the event. John A. Doherty, Executive Vice President of the Michigan Health Council, remarked, "There is no better way for students to learn while in high school of so many fascinating and meaningful careers than by observing and assisting doctors and other hospital personnel for six weeks during summer vacation. Nearly every one of the students who participated during 1969 and 1970 now is enrolled in a Michigan college, university, or hospital and are on the way toward becoming a doctor or other important member of the health team."

Currently funds for the program come from the Chrysler Corporation Fund, the Neighborhood Youth Corps Program and a $10,000 grant from the National Urban Coalition. Michigan Blue Cross-Blue Shield, the Detroit Medical Society, and the Michigan State Medical Society were among the organizations who, in cooperation with the Michigan Health Council, the Youth Commission and the Detroit Public Schools have funded and operated the program.

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health

For the Four-Week Period Ending August 27, 1971

	1971 This 4-Week Period	1970 Same 4-Week Period	1971 Total To Above Date	1970 Total Same Date	Total Cases for 1970
Rubella	65	101	2,601	2,621	3,012
Congenital Rubella Syndrome	0	0	1	0	2
Measles	64	84	2,262	1,682	1,834
Whooping Cough	27	32	89	122	195
Diphtheria	—	—	—	—	—
Mumps	89	152	9,431	4,905	7,825
Scarlet Fever & Strep Sore Throat	308	268	8,097	8,189	11,863
Tetanus	1	0	2	4	8
Poliomyelitis (paralytic)	0	0	0	1	2
Hepatitis	348	352	3,278	3,039	4,594
Salmonellosis (other than S. typhi)	66	71	436	432	665
Typhoid Fever (S. typhi)	1	1	4	8	14
Shigellosis	19	19	129	134	225
Aseptic Meningitis	33	52	111	100	296
Encephalitis	8	21	82	88	155
Meningococcic Meningitis	3	3	52	49	69
H. Influenza Meningitis	7	1	58	37	61
Tuberculosis	143	163	1,246	1,345	2,006
Syphilis	435	277	2,868	2,457	3,900
Gonorrhea	1,874	1,850	13,682	13,155	20,676

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

Specialized ★ Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

THE

MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Professional Protection Exclusively since 1899

DETROIT OFFICE: R. K. Wind and J. K. Galloway, Representatives
27200 Lahser Road, Southfield 48076, Telephone: (Area Code 313) ELgin 3-4848 or 444-1439

GRAND RAPIDS OFFICE: G. J. Haworth, Representative
422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477

Benefits of Umbrella Insurance Policy Described by MSMS Insurance Counsel

By Ben P. Stratton, Lansing
MSMS Insurance Counsel

Relatively new in the area of insurance is the umbrella (or excess liability) policy. Its enthusiastic acceptance can be compared to the quick popularity gained by the home owners policy about 20 years ago. Umbrella protection has gained acceptance because it has filled a need for broader liability coverage with high limits of $1,000,000 and more.

The new policy augments an insurance program. It does not replace existing policies unless there happens to be a limited excess liability contract in the portfolio. All basic liability policies are listed showing numbers, name of company, policy period, and liability limits. Certain limits are required and these are altered to meet the requirements when necessary. Also provided is broader coverage by the inclusion of "personal injury" i.e. libel, slander, invasion of privacy, etc. This section is not usually part of basic coverage.

Are limits of $1,000,000 or more necessary? Well, I can remember when $20,000 was considered very adequate as an upper limit for automobile liability. At the same time I recall a new low priced car could be bought for six or seven hundred dollars. Hospital rooms were available for five or six dollars a day. Perhaps even more important is the change in attitude toward fault. Nowadays it seems we must find someone responsible in almost every situation involving injury or damage.

Getting back to the question as to the necessity of $1,000,000 limits, we don't have to look far to find records of damage awards in varous liability claims of more than $1,000,000. You probably will never be sued for such a high amount but there is no absolute certainty you won't be. There is a doctor in Florida who is financially ruined for life because his malpractice limits were only $5,000 and $15,000.

Less than 25 years ago, I had never heard of comprehensive personal liability insurance. Then, suddenly in the late 1940's, the public demanded protection in case they were sued by a mail man or someone hit by a golf ball, or some other injured person. Why? Because of an article in *Reader's Digest* outlining the dire consequences of not having protection for home ownership and personal acts. We could hardly keep up with the demand for the popular new policy which could be bought for $10 a year.

The insurance market is more sophisticated now. Little liability policies are not sold individually. Instead the coverage is included as part of the homeowners package. The package concept has extended throughout the insurance field. I believe we will see the concept more fully and effectively developed in the future all to the advantage of the insurance buyer. It is conceivable that all protection for property, liability, health, and life will be included in one package with a single billing.

I would like to close with a word of warning. Make certain your insurance program is properly arranged. Remember it is no stronger than its weakest component. You may be adequately protected in all areas except one and then find yourself in financial jeopardy because of the Achilles heel of which you were unaware.

If you do not have umbrella protection, consider its advantages. Properly applied for and written, it opens a broad canopy of protection over you, your immediate family, your practice, and your belongings. The resulting peace of mind makes this policy one of the best bargains in the insurance market today.

Florida Licensing Board Approves Endorsement Method

Effective Sept. 1, 1971, for the first time in history, the Board of Medical Examiners of Florida may issue licenses by endorsement to practice medicine and surgery in Florida.

An amendment to the Medical Practice Act of Florida, enacted by the 1971 legislature allows issuance of licenses by endorsement to those MD's who have been certified by the National Board of Medical Examiners or the Federation Licensure Examination (FLEX) within a period of eight (8) years preceding the date of application for licensure by endorsement. Since the effective date is September 1, 1971, this means that an MD must have been certified by the National Board of Medical Examiners since September 1, 1963, in order to initially be eligible for licensure by endorsement. As far as other state licensure examinations are concerned, this amendment only applies to those states who use the Federation Licensure Examination (FLEX) as their licensure examination.

in cardiac edema

Dyazide®

Trademark

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

gets the water out

spares the potassium

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome, late pregnancy; also steroid-induced and idiopathic edema, and edema resistant to other diuretic therapy. 'Dyazide' is also indicated in the treatment of mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

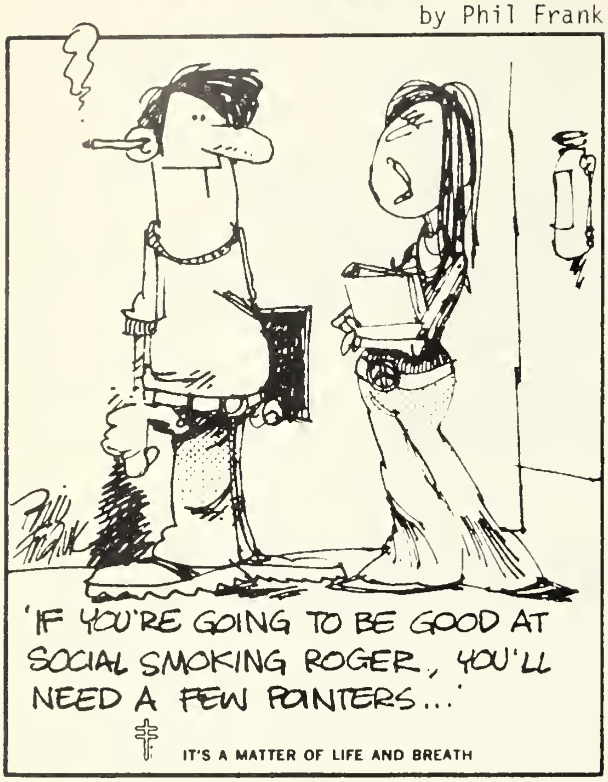
Supplied: Bottles of 100 capsules.

SK
&F

SK&F Co., Carolina, P.R. 00630
a subsidiary of Smith Kline & French Laboratories

ASHES TO ASHES

by Phil Frank


PHIL FRANK
'IF YOU'RE GOING TO BE GOOD AT SOCIAL SMOKING ROGER, YOU'LL NEED A FEW POINTERS...'
IT'S A MATTER OF LIFE AND BREATH

A set of eye-catching cartoons with a serious message, the work of Cartoonist Phil Frank, is currently in use by the Michigan Tuberculosis and Respiratory Disease Association for purposes of warning young people about the very real hazards of smoking.

Mr. Frank, who formerly taught advertising layout at Michigan State University, worked with the TB Association through the Justin Ward Advertising Agency while he was designing the set of sketches, 12 of which have been chosen for national purposes. The association now plans to send them to college newspapers across the country. It is hoped that the newspapers will carry them on ecology and health pages in an effort to catch the attention of their student readers.

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road — Conducted by Sisters of Mercy — Ann Arbor, Michigan
Telephone — 313 663-8571

Mercywood Hospital is a private neuropsychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multi-disciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

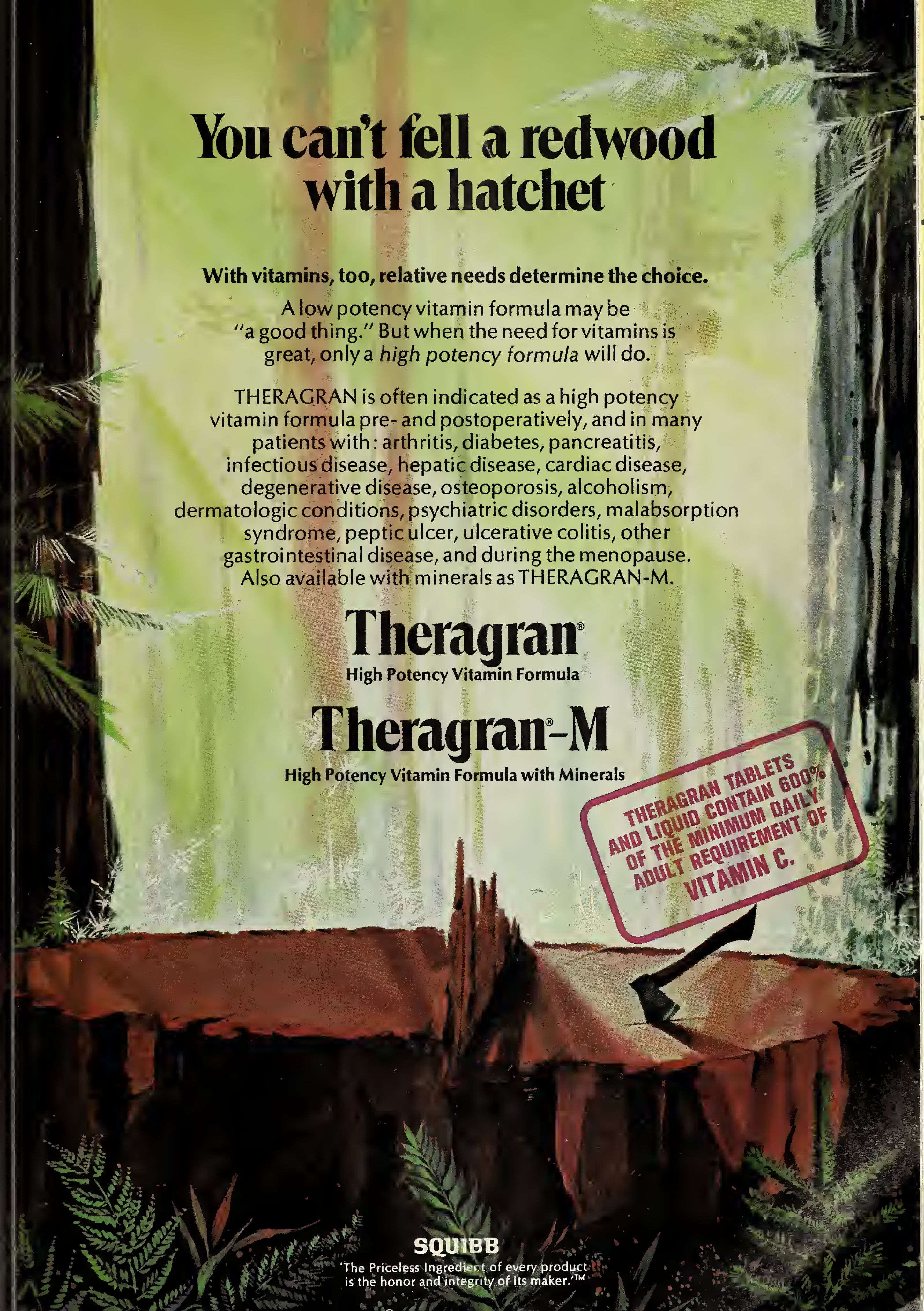
Certified for: Medicare and M.A.A. programs

PSYCHIATRIC STAFF

Lyle M. Allis, M.D.
Robert J. Bahra, M.D.
Dean P. Carron, M.D.
Francis M. Daignault, M.D.
Gordon C. Dieterich, M.D.
*1904-1967

James R. Driver, M.D.
Alexander P. Dukay, M.D.
Robert L. Fransway, M.D.
Stuart M. Gould, Jr., M.D.
Leonard E. Himler, M.D.*
Sydney Joseph, M.D.

Hubert Miller, M.D.
Jacob J. Miller, M.D.
Rudolf Nobel, M.D.
Gerard M. Schmit, M.D.
Prehlad S. Vachher, M.D.
Richard D. Watkins, M.D.



You can't fell a redwood with a hatchet

With vitamins, too, relative needs determine the choice.

A low potency vitamin formula may be "a good thing." But when the need for vitamins is great, only a *high potency formula* will do.

THERAGRAN is often indicated as a high potency vitamin formula pre- and postoperatively, and in many patients with: arthritis, diabetes, pancreatitis, infectious disease, hepatic disease, cardiac disease, degenerative disease, osteoporosis, alcoholism, dermatologic conditions, psychiatric disorders, malabsorption syndrome, peptic ulcer, ulcerative colitis, other gastrointestinal disease, and during the menopause. Also available with minerals as THERAGRAN-M.

Theragran®

High Potency Vitamin Formula

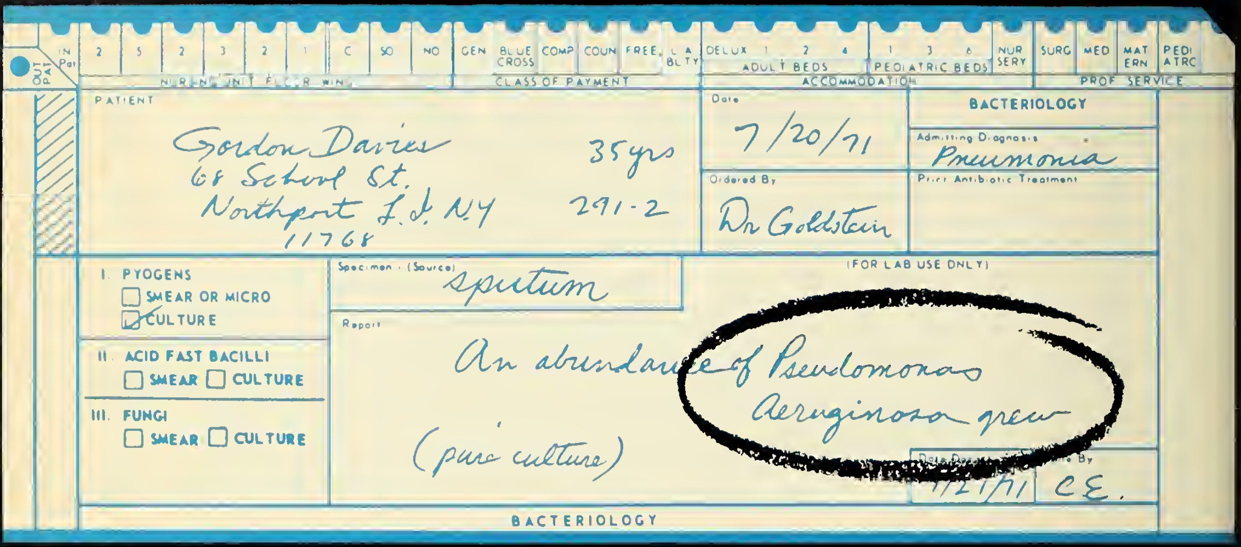
Theragran®-M

High Potency Vitamin Formula with Minerals

THERAGRAN TABLETS AND LIQUID CONTAIN 600% OF THE MINIMUM DAILY ADULT REQUIREMENT OF VITAMIN C.

SQUIBB

'The Priceless Ingredient of every product is the honor and integrity of its maker.'™



IN Pat | OUT PAT

2 | 5 | 2 | 3 | 2 | 1 | C | SO | NO

NURSING UNIT FLOOR WING

GEN | BLUE CROSS | COMP | COUN | FREE | L A BLTY

CLASS OF PAYMENT

DELUX 1 2 4 ADULT BEDS | 1 3 6 PEDIATRIC BEDS | NUR SERY

ACCOMMODATION

SURG | MED | MAT ERN | PEDI ATRC

PROF SERVICE

PATIENT

Gordon Davies 35 yrs
68 School St.
Northport L.I. N.Y 291-2
11768

Date 7/20/71

Ordered By Dr Goldstein

BACTERIOLOGY

Admitting Diagnosis Pneumonia

Prior Antibiotic Treatment

I. PYOGENS
☐ SMEAR OR MICRO
☑ CULTURE

II. ACID FAST BACILLI
☐ SMEAR ☐ CULTURE

III. FUNGI
☐ SMEAR ☐ CULTURE

Specimen - (Source) sputum

(FOR LAB USE ONLY)

Report An abundance of Pseudomonas Aeruginosa grew (pure culture)

7/21/71 | By C.E.

BACTERIOLOGY

the choice is clear:

Pyopen®

(sterile disodium carbenicillin)

A serious infection...Pseudomonas, confirmed by pure culture. Fortunately, the strain proves sensitive to carbenicillin and the patient is not allergic to penicillins. The choice is clear: Pyopen.

Unlike other antibiotics currently available for the treatment of Gram-negative sepsis, there are no reports of nephrotoxicity or ototoxicity with Pyopen therapy. Its effectiveness against *Ps. aeruginosa* and *Proteus* species (particulary indole-positive strains) has been amply confirmed by clinical experience and microbiologic studies.

Pyopen is a product of Beecham, the company which pioneered most of today's semi-synthetic penicillins. Your Beecham-Massengill representative would like to give you proof of our dedication to the concept of Total Service.

THE TOTAL SERVICE CONCEPT:
Beecham-Massengill's dedication to the concept of total service is exemplified by the Pyopen Program — offering valuable teaching-learning materials and an added measure of personal attention: *Gram-Negative Sepsis,* a multimedia presentation by leading American medical authorities...*A Profile of Pseudomonas,* a monograph for the clinical microbiologist... *24-hour consultation service* in matters relating to carbenicillin (phone: 201-778-9000)... *emergency supply,* a novel plan for assuring the continual availability of Pyopen to hospitals specifying this brand of carbenicillin.

For additional information about the Beecham-Massengill Total Service Concept see our representative or write to us directly.

BEECHAM-MASSENGILL PHARMACEUTICALS
Div. of Beecham Inc.
Bristol, Tennessee 37620

PRESCRIBING INFORMATION **Indications:** Primarily for treatment of infections due to susceptible strains of *Pseudomonas aeruginosa, Proteus* species (particularly indole-positive strains), and certain *Escherichia coli.* Clinical effectiveness has been demonstrated in the following infections when due to these organisms: Urinary tract infections; severe systemic infections and septicemia; acute and chronic respiratory infections (while clinical improvement has been shown, bacteriologic cures cannot be expected in patients with chronic respiratory disease and cystic fibrosis); soft tissue infections. Although PYOPEN (disodium carbenicillin) is indicated primarily in Gram-negative infections, its activity against Gram-positive organisms should be kept in mind when both Gram-positive and Gram-negative organisms are isolated (see Actions). **Note:** During therapy, sensitivity testing should be repeated frequently to detect the possible emergence of resistant organisms. **Actions:** Organisms found to be susceptible *in vitro* include: Gram-Negative Organisms-*Ps.* aeruginosa, *Proteus mirabilis, Pr. morganii, Pr. rettgeri, Pr. vulgaris, E. coli, Enterobacter* species, *Salmonella* species, *Hemophilus influenzae,* and *Neisseria* species. Gram-Positive Organisms-*Staphylococcus aureus* (nonpenicillinase-producing), *Staph. albus, Diplococcus pneumoniae,* Beta-hemolytic streptococci, and *Streptococcus faecalis.* Some newly emerging pathogenic strains of *Herellea, Mima, Citrobacter,* and *Serratia* have also shown *in vitro* susceptibility. Not stable in the presence of penicillinase. *Klebsiella* species are resistant. Some strains of *Pseudomonas* have developed resistance fairly rapidly. **Contraindications:** Known penicillin allergy. **Warnings:** Serious and occasional fatal hypersensitivity (anaphylactic) reactions have been reported in patients on penicillin therapy. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens. There have been reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, appropriate therapy should be instituted and discontinuance of disodium carbenicillin therapy considered, unless the infection is life threatening and only amenable to disodium carbenicillin therapy. The usual agents (antihistamines, pressor amines, and corticosteroids) should be readily available. **Usage in Pregnancy:** Safety for use in pregnancy has not been established. **Precautions:** As with any other potent agent, it is advisable to check periodically for organ-system dysfunction, including renal, hepatic, and hematopoietic systems, during prolonged therapy. Emergence of resistant organisms, such as *Klebsiella* species and *Serratia* species, which may cause superinfection, should be kept in mind. Each gram contains 4.7 mEq sodium; in patients where sodium restriction is necessary, such as cardiac patients, periodic electrolyte determinations and monitoring of cardiac status should be made. Observe patients with renal impairment for bleeding manifestations and adhere strictly to dosage recommendations. If bleeding manifestations appear, discontinue antibiotic and institute appropriate therapy. As with any penicillin preparation, the possibility of an allergic response, including anaphylaxis, may occur, particularly in a hypersensitive individual. **Administration:** Intramuscular injections should be made well within the body of a relatively large muscle (not into the lower and mid-third of the upper arm), and aspiration is necessary to help avoid inadvertent injection into a blood vessel. May be given by either intravenous injection or intravenous infusion. After reconstitution with Sterile Water for Injection unused portions should be discarded after 24 hours if stored at room temperature, or after 72 hours if refrigerated. **Adverse Reactions:** *Hypersensitivity Reactions*—Skin rashes, eosinophilia, pruritus, urticaria, drug fever, and anaphylactic reactions. *Gastrointestinal Disturbances*—Nausea. *Hemic and Lymphatic Systems*—Hemolytic anemia, thrombocytopenia, leukopenia, neutropenia, in uremic patients receiving high doses (24 gm/day), hemorrhagic manifestations associated with abnormalities of coagulation tests, such as clotting and prothrombin time. *Hepatic and Renal Studies*—SGOT and SGPT elevations have been observed, particularly in children. To date, no clinical manifestations of renal disorders have been demonstrated. *Central Nervous System*—Convulsions or neuromuscular irritability could occur with excessively high serum levels. *Local Reactions*—Pain at the site of injection, sometimes accompanied by induration. Vein Irritation and Thrombophlebitis—particularly when undiluted solution is injected directly into the vein. **How Supplied:** Available in 1 Gm. and 5 Gm. vials.

Before prescribing or administering, see package circular or PDR.

DARVON®
COMPOUND-65
65 mg. propoxyphene hydrochloride, 227 mg.
aspirin, 162 mg. phenacetin, and 32.4 mg. caffeine
Lilly
H06

Additional information available to the profession on request.
Eli Lilly and Company • Indianapolis, Indiana 46206

Lilly

101488

HOW TO PUT MAN TOGETHER AGAIN

By the Rev. Robert B. Reeves, Jr.,
Chaplain, the Presbyterian Hospital
In the City of New York

In many ways today, man seems to have fallen apart. It has often seemed that way before, when crises, sudden change, disaster have come to man. History is full of catastrophe. But in other ages, man could always find some kind of sanctuary in places or pursuits unchanged.

And rarely, if ever, has the inner life of man appeared to be so fragmented. It is not merely that external events are topsy-turvy, but that man himself seems to be coming apart. Both individually and as a species, our identity, worth, and purpose are cracked and breaking, if not already shattered.

Fragmentation in Medicine and Religion

This fragmentation is especially apparent in the realms of medicine and religion.

In medicine, the fragmentation probably began when the art declined and medicine became a science. As a science, medicine could no longer deal with man as a total being, but only with that aspect of man which could be comprehended in physio-chemical categories.

There has come in scientific medicine a tendency to depersonalize the human being, to see him as a thing, a specimen, a case, a number. As hospitals move toward automated mass production, the personhood of the patient is sometimes the last thing to be considered, if it is considered at all. The patient's identity is reduced to computer-bits in a data storage bank.

Further fragmentation has come in the way this preoccupation with physio-chemistry has often led to disregard of social, ethical, and religious values. In infancy, the unfit are not allowed to die; children with congenital defects are "saved," to reproduce and further degrade the human stock. In old age, the process of dying is prolonged with heroics that often outrage the integrity and dignity of man. It is sometimes a question whether scientific medicine, in terms of the total good of man, is contributing more to sickness than to health.

In religion, the fragmentation began when reverence for the body was lost, and spirituality was presumed to be an attribute of the soul. Man was split in two, with the spirit seeking freedom from captivity to the flesh, the flesh seeking to ensnare and betray the spirit.

So it came about, that if a man were religious, he was likely to be ashamed of his body and its functions, especially the functions of elimination and reproduction, which were seen as the lowest of the functions of the flesh.

With this Western Christian denial of the flesh came also denial of the emotions, especially those that accompany strong instinctual drives: fear, anger, sorrow, lust. Such feelings were regarded as unworthy of the spiritual life. But just as medicine, in stamping out disease, also stamped out much of what is human in man, so religion, in stamping out what it regarded as unworthy emotion, also stamped out much of man's humanity.

Thus medicine and religion have fragmented man. Each has taken an aspect of man's being, and dealt with it as if it were the whole, in disregard of the other aspect. Between them, medicine and religion have split man in two, and if they continue to do so, may well be regarded as two of the chief threats to man's survival.

Man Can Be Whole

But we know that man can be a whole creature.

Were that not so, we would not be aware that he is falling apart.

The early Greeks, at least until the time of Plato, knew what it was to be a whole man; and so did the early Jews, through most of the period covered by the Bible; and the Chinese, through the centuries of Confucian teaching; and the Moslems, in large part even to this day. These all shared two basic convictions, although they expressed them in very different ways. The first, was that man was one with nature, and the second, that man was one with himself.

The uniqueness of man lies not in the way he was made, but in the relationship God enters into with him. In the Biblical mythology, God talks with man, makes a covenant with him, whereby He gives man rule over all other creatures and grants him the freedom of the Garden, provided man acts responsibly as a creature, obeys God, and does not presume to rival Him—for that is the meaning of the warning not to eat the forbidden fruit. Man is unique because of this covenant relationship, not because of any substantive difference in the way he was made.

The "image of God" in which he was created means just what it says. The writers of Genesis

(Continued on Page 976)

Prepared for the American Medical Association Committee on Medicine and Religion, Atlantic City, June 20, 1971.

thought of God in human form, surpassingly splendid, to be sure, but still in the likeness of man. Man, they believed, was made to look like Him, and to engage in conversation with Him. That, and the covenant relationship, were the only things that distinguished man from all other creatures. He was one with nature.

And he was one with himself. The Bible has no word for what we mean by "soul" apart from body, or for what we mean by "body" apart from soul. Further, no distinction is made in the Bible between spiritual salvation and physical health. Man as creature of nature and as child of God is one being.

Mind and body are one. There is no such thing as mind distinguishable from body, or body distinguishable from mind. Mind and body are simply abstract descriptive terms to indicate aspects of man's functioning. Every function is an expression of total man.

In a study of 500 patients at the Presbyterian Hospital in New York City, the researchers did not find rapid healing without high acceptance, or high acceptance without rapid healing. They were inseparable aspects of the way the patient as a whole responded: They implied just one thing, that man is a unitary being.

Putting Man Together Again

How to put man together again? How, in medicine and religion, can we begin to overcome man's fragmentation? There are these suggestions:

We must stop talking about "body" and "soul," and, instead, concentrate on the living being as a whole, the person in his totality, the *nephesh*. We dare not any longer go our separate ways, the doctor tending the body, the clergyman the soul, for that only deepens the fragmentation, and makes man sicker. To put man together again, *we* have got to work together, each of us mindful of the whole man, and each of us mindful of what the other can do to help.

The day is past when a hospital can justify getting along without chaplaincy service.

The day is past, when community agencies devoted to health and the churches of the community may carry on without regard to each others' purposes and programs.

The frame of reference for both medicine and religion, the basic motivations and ultimate goals for both, will have to do with the total wellbeing of the total man.

Physicians and clergymen must recognize just how much of the medical sickness and religious lostness in our society is an expression or result of fragmentation.

We must help man improve his relationships to other people. Whenever his relationships are damaged, by exploitation, loss, rejection, or failure, his own inner identity, worth, and purpose are damaged, too. Many sicknesses, medically and religiously, are rooted in damaged or broken relationships, chiefly those between parent and child, husband and wife.

We must recognize that these broken relationships account for disabling, and often lethal, trauma. Carelessness, neglect, hostility, violence in the use of automobiles, in addiction to drugs or alcohol, in competitive sports, are almost always the result of failure to observe the rules, or a shirking of responsibility, or a disregard of the other fellow's rights.

Our concern must be with the fundamental relationships of man to himself, to his family, and to society. Both medicine and religion must concentrate on prevention, on building the kind of relationships that will make man whole, and do away with the fragmentation that leads him into sickness and aberrant behavior.

If computerized data-processing is inevitable in health care, as it seems to be, then we shall have to make a double effort to recover the kind of physician-patient relationship that once prevailed, in the days when medicine was an art, and the kind of pastor-patient relationship that centers on the person, rather than on "spirituality."

Physicians and clergymen also must strive to restore man's covenant with nature. If we fail to do so, it will not matter much what else we try to do in medicine and religion, for man's life will become miserable beyond repair, if man is here for long.

Population must be brought under control.

Exploitation of resources must be stopped.

Pollution in all its forms must be radically reduced.

Medicine and religion bear an awesome responsibility.

For medicine, it may have to mean turning its back upon many scientific opportunities, in order to regain the human values by which man can be made whole.

For religion, it means rejecting the angelistic piety we have inherited, and recovering reverence for the whole man, and the whole realm of nature, of which man is a creature.

Man's covenant with life, on which his health and salvation depend, can be restored only when the keepers of his health and salvation, his physician and his pastor, themselves make covenant to serve man's total wellbeing.

Empirin® Compound with Codeine, gr. ½ or gr. 1

Helps overpower pain

Each tablet contains: aspirin gr. 3½,
phenacetin gr. 2½, caffeine gr. ½.
No. 3 contains codeine phosphate* (32.4 mg.) gr. ½.
No. 4 contains codeine phosphate* (64.8 mg.) gr. 1.
(Warning—may be habit forming.)

Empirin Compound with Codeine is now classified in Schedule III.
Available on oral prescription and may be refilled 5 times
within 6 months, unless restricted by State law.

Complete literature available on request from Professional Services Dept. PML.

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

In memoriam

Walter F. Bach, MD
Dearborn Heights

Walter F. Bach, MD, Dearborn Heights physician, died July 24 at the age of 78. A graduate of the University of Michigan and the University of Michigan Medical School, Doctor Bach established a general practice and was affiliated with Detroit Memorial Hospital. He held Life Memberships in the Academy of General Practice, the Michigan State Medical Society and the Wayne County Medical Society.

He had practiced on the west side of Detroit for 45 years.

William Clement Behen, MD
Lansing

William Clement Behen, MD, a Lansing physician from 1924 to 1966, died September 2 in Miami, Florida at the age of 80. An eye, nose and throat specialist, Doctor Behen was a veteran of World War I and had served as a Red Cross surgeon in Poland from 1919 to 1920. He had studied at the University of Vienna eye clinic.

Doctor Behen's community activities in Lansing included membership in the American Legion, 40 et 8, the Veterans of Foreign Wars, Knights of Columbus and Elks Lodge, and St. Mary Cathedral.

William R. Bristol, MD
Detroit

William R. Bristol, MD, Detroit general practitioner, died August 12 at the age of 50. Doctor Bristol was awarded his medical degree by the Wayne State University School of Medicine in 1946. He completed his internship at Detroit Receiving Hospital in 1947 and also held a surgical fellowship at Detroit Receiving from 1949-1950. Doctor Bristol took postgraduate work in pharmacology at Wayne State University during the year 1950-1951.

Affiliated with Saint John, Deaconess, Cottage, Detroit Memorial and Saratoga General Hospitals, Doctor Bristol was a member of the Academy of General Practice, Nu Sigma Nu Medical Fraternity, and American Academy of Gastroenterology. He was a captain in Europe in World War II and was a member of the Detroit Century Club.

Samuel M. Brown, MD
Oak Park

Samuel M. Brown, MD, veteran general practitioner and a lifelong Detroiter, died Aug. 9 at the age of 65.

Doctor Brown was graduated from the Detroit College of Medicine (now Wayne State University School of Medicine) with an MB degree in 1929, and earned his MD degree from the same institution in 1930. He served his internship at Providence Hospital from 1929-1930.

He retired from practice in 1969 and moved to Oak Park, where he was a member of the W.C.M.S. and the Oakland County Society. Doctor Brown had practiced in Detroit for 39 years, where he was affiliated with Mount Carmel Mercy Hospital. He was a member of the Fraternal Order of Eagles.

James M. Fitzgerald, MD
Detroit

James M. Fitzgerald, MD, a staff physician at Mt. Carmel Hospital, died August 23 at the age of 62 while vacationing in Au Train. He had practiced medicine in Detroit since 1946 and served his internship and residency at Henry Ford Hospital.

Doctor Fitzgerald was graduated from the University of Pennsylvania medical school in 1934 and attained the rank of major while serving in the Air Force.

Daniel E. Hasley, MD
Detroit

Daniel E. Hasley, MD, Detroit physician and a pioneer in scientific research on undulant fever and brucella abortus infection in cattle, died August 16 at the age of 74. Doctor Hasley's research led to the legislation in 1930 which required the pasteurization of all milk sold in Detroit.

Doctor Hasley received his bachelor and master degrees in bacteriology at Michigan State University and completed his postgraduate work at Tulane University. He receievd his medical degree from the Wayne State University in 1934. He had taught more than 30 years at WSU School of Medicine before retiring as a professor of bacteriology in 1962.

Memorials in Doctor Hasley's name may be made to the Daniel E. Hasley MD Memorial Fund at Wayne State University School of Medicine.

Marinus A. Hoffs, MD
Lake Odessa

Marinus A. Hoffs, MD, a Hastings physician and hospital administrator for the past 40 years, died August 22 at the age of 69. A dedicated civic leader, Doctor Hoffs had retired from private practice in 1968, but continued to be active as medical director of the Barry County Medical Facility at Hastings. Doctor Hoffs had also served on the Lake Odessa School Board and was a Village Council member. He had been chief of Staff at Ionia County Memorial Hospital two years and was on the staff of Pennock Hospital in Hastings.

A native of Hosper, Iowa, he earned his bachelor's degree at Hope College in 1924 and his medical degree in 1928 from Northwestern University. He served his internship at Butterworth Hospital in Grand Rapids before coming to Lake Odessa in 1929. Doctor Hoffs was a member of the Central United Methodist Church and was a charter member of the Lake Odessa Lions Club.

Contributions in Doctor Hoffs' memory may be made to a memorial fund through the Pickens Funeral Chapel.

Lloyd W. Howe, MD
Marquette

Lloyd W. Howe, MD, Marquette, who practiced medicine for 63 years before retiring in 1969, died August 23 at the age of 86. A native of Perrington, he was graduated from the University of Michigan Medical School and began practice in 1906 in Kalamazoo. In 1907 he accepted a position at Pellston as physician for the Cobb and Mitchell Lumber Company, then soon became head of the medical program at the state school at Coldwater.

Doctor Howe went to Marquette in 1916 and served on the staffs of both St. Luke's and St. Mary's Hospitals and was at one time chief of staff at St. Luke's.

Doctor Howe served for 48 years as team physician for both the Northern Michigan University and Marquette High School football and basketball squads. He was honored during a "Dr. Howe Night" staged by the NMU Athletic Club and was recognized by the staff of St. Luke's Hospital in December, 1969, for his long service.

Harold Morris, MD
Detroit

Harold Lewis Morris, MD, Detroit urologist and surgeon, died August 18 at the age of 82. Doctor Morris was a former chief of staff at Mt. Carmel Mercy Hospital, and held memberships in the American Urological Association, the Detroit Urological Association and the Academy of Surgery.

A graduate of the University of Michigan Medical School, Doctor Morris was also affiliated with the Chamber of Commerce of Novi.

Contributions in memory of Doctor Morris may be made to the St. Francis Home for Boys, the Renal Dialysis Unit at Mt. Carmel Mercy Hospital and the W. D. Fryfogle Medical Research Laboratory.

John C. Pollard, MD
Ann Arbor

John C. Pollard, MD, University of Michigan psychiatrist and a national authority on drug abuse, died August 15, in Cincinnati, Ohio, of a heart attack at the age of 45. Doctor Pollard had been in Cincinnati to address a community drug clinic when he was stricken.

A professor of psychiatry at the U-M Medical School, Doctor Pollard was a senior member of the Adolescent Service of the Neuropsychiatric Institute and was also a research psychiatrist with the U-M Mental Health Research Institute. A native of England, he received his medical degree in 1951 from London University, Middlesex Hospital Medical School. Doctor Pollard served in the Royal Army Medical Corps from 1952 to 1954 and was Chief, Medical Service, Military Hospital, Berlin, and medical officer for Allied Prison for Major War Criminals, Spandau, Berlin. He came to the United States in 1955 and served four years as psychiatric resident at the Warren State Hospital in Pennsylvania and the U-M Medical Centre. He joined the U-M Medical School faculty as an instructor in 1959.

Widely sought as a consultant on drug abuse, Doctor Pollard was advisor to Girl's Training School in Adrian, Northville State Hospital, Catholic Family Services of Washtenaw County and Ann Arbor Mayor Robert A. Harris. He was also a consultant to drug abuse committees in Wisconsin and Illinois and to three Peace Corps projects on Thailand, Nigeria and Gambia.

Doctor Pollard also served on the Governor's Task Force for Research in Mental Health and was chairman, Committee for Graduate Psychiatric Education in Michigan and Consultant to the

(Continued on Page 981)

Classified Advertising

$5.00 per insertion of 50 words or less, with an additional 10 cents per word in excess of 50.

Are you tired of the smog, traffic congestion, sociological problems, crime and other irritations which have become part of today's urban living? Well then DISCOVER WATERTOWN, WISCONSIN. Exchange all the big city unpleasantries for the peaceful environment and easy going pace of a residential city. Watertown, a progressive community is ideally located equi-distant between Milwaukee and Madison in Southeastern Wisconsin's lake district. The community has a trade (and medical practice) area serving 40-50,000 people. Many new schools, parks, trees and recreational opportunities. A stable economy. Our new Community Health Care Center with its beautiful 110-bed general hospital, connecting (but separate) 24-unit Medical-Dental Office Building (choice of suites still available), and connecting 130-bed Nursing Home, was completed in the Spring of 1971. WE URGENTLY NEED another Internist, an Otolaryngologist, an Ophthalmologist, Obstetrician-Gynecologists, Pediatricians and Family Practitioners to join existing medical staff. An immediate successful practice assured. Excellent rapport with the University of Wisconsin Medical School at Madison, and the Medical College of Wisconsin (formerly Marquette University School of Medicine) at Milwaukee. Medical Staff leading and supporting recruitment effort. Write or call Dr. Paul Glunz, Watertown Memorial Hospital, Watertown, Wisc. 53094. Telephone (404) 261-4210.

RADIOLOGIST Board Certified desires to practice in northern Michigan below the upper peninsula. Prefer solo practice but will consider all opportunities. Send replies to Box #6, 120 W. Saginaw Street, East Lansing, Michigan 48823.

E. N. T. SOLO PRACTICE: Very active solo E. N. T. Practice in Downriver, suburban Detroit, available immediately due to accidental death. Building, Land, complete E. N. T. and office equipment with terms. Previous owner on staff of three hospitals, each within five minutes of office. Unrivaled opportunity to start now in a busy practice which is a going concern. Call (313) AV 5-4030.

GENERAL PRACTITIONERS — Community of Mt. Pleasant, Michigan desirous of securing 4 general practitioners. Good hospital privileges available. 125 bed, fully accredited. Excellent consultants available in community. Mixed M.D., D.O. Staff. Active staff of 28 physicians. Community of 22,000. Site of Central Michigan University, 14,500 students. Four season area. Metropolitan areas within 50 miles. Service area of 75,000. Five G.P.'s in active practice. Community will assist actively in helping you get established. Call collect R. E. Pieratt, Adm. (517) 773-7941 or Frank Johnson, M.D., Chairman Recruitment Committee, area (517) 772-4846.

PHYSICIAN 60, must curb activities. Seeks opportunity of four to five hours per day. Non-metropolitan area. Will consider institutional work, extra in busy office, student health small college, or non-medical allied field. Experience broad and in-depth. General practice, Emergency room, obstetrics and gynecology (College OB-GYN). Oriented in field psychosomatic medicine. References. Reply Box #7, 120 West Saginaw Street, East Lansing, Michigan 48823.

WANTED: Internist, Board Certified or eligible. Present associate retiring Dec. 1. Established active practice, house staff and medical student teaching available if interested. Located in medical arts building adjacent to hospital, Lansing, Michigan. Reply: Box #8, 120 West Saginaw Street, East Lansing, Michigan 48823.

WINTER-SUMMER VACATIONLAND—Staff Physician or Internist. Interesting and challenging assignment, small progressive, affiliated hospital. Ideal location, easy access to metropolitan area. Competitive salary with increment schedule; leave policy 30 days vacation, 9 holidays, 15 sick days yearly; attractive retirement system credits military service; full scale fringe benefits. Licensure (any state) required. Equal opportunity employer. Call collect E. R. Cleveland, M.D., Chief of Staff, Area 517, 793-2450, Ext. 201, VA Hospital, Saginaw, Michigan.

PSYCHIATRIC RESIDENCIES—Excellent, approved psychiatric training; both demanding and clinically rich with a stimulating, well-balanced program. Affiliated with Michigan State University's College of Human Medicine. The setting is a culturally satisfying community; the serene, scenic Grand Traverse Bay area. Three year plan: $12,215 to $13,885; five year plan: $13,927 to $26,121. Contact Dr. Paul E. Kauffman, Director of Psychiatric Training, Room (165), Traverse City State Hospital, Traverse City, Michigan 49684. Phone: (616) 947-5550. An equal opportunity employer.

MACOMB COUNTY: High quality residential neighborhood. New building available about December 1971. For Dental and Medical use, Garfield Road in Clinton Township. Call Philip Pierce (313) 771-1875.

Advertisers in MICHIGAN MEDICINE are friends of the profession. By accepting their advertising we show confidence in them, their services and products. They help make the journal a quality publication. Please familiarize yourself with their services and products and let them know that you see their advertising in MICHIGAN MEDICINE.

House Committee for Study of Drug Use and Abuse.

Licensed to practice both in Great Britain and in Michigan, Doctor Pollard was a fellow of the American College of Psychiatrists and the American Psychiatric Association. Also included among his professional memberships were the British Medican Association, American Medical Association, and the New York Academy of Sciences.

Contributions in memory of Doctor Pollard may be made to the John C. Pollard Children's Educational Fund, in care of Attorney Paul Lieberman, trustee, 111 S. Main, Ann Arbor 48108.

J. A. Ramsey, MD
Alpena

J. A. Ramsey, MD, Alpena physician and member of the staff of the Medical Arts Clinic, died August ?? at the age of 62. A native of Blossburg, Pa., Doctor Ramsey came to Alpena in 1939. He later joined the staff of the Medical Arts Clinic and was instrumental in the implementation of its new quarters. He received his B.A. from the University of Michigan and was graduated from the Wayne State University School of Medicine. He completed his internship at Harper Hospital and was a resident surgeon at Eloise Hospital. He also served four years with the Army during World War II and attained the rank of lieutenant colonel.

HOSPITAL-MEDICAL PLANNING, INC.
Alca Universal Building
East Lansing, Michigan
48823
517 332-1333

PROFESSIONAL PERSONNEL RECRUITMENT
FOR
HOSPITALS CLINICS UNIVERSITIES
Administratars, Physicians, Dept. Heads

ATTENTION: MEDICAL GROUPS

We welcome inquiries from all Medical Groups in Michigan who need additional physicians. Our specialized recruitment program regularly turns up men interested in a good situation in the Great Lakes States or another part of the country. By presenting a variety of opportunities in Michigan to these men, we can assist in meeting Michigan's needs. We work with only the best men. Write or call Arthur A. Lepinot.

WANTED: MEDICAL DIRECTOR

Resumes are welcome from physicians of all specialties. There is no financial obligation to the individual physician. We are searching for men in all specialties for excellent appointments available in Groups, Clinics, Hospitals, and Universities in the Great Lakes Region. We are now looking for a Medical Director for a hospital and also for a large steel company employing 11,000 people. An excellent position. Send your resume or call Arthur A. Lepinot.

Doctor Ramsey was a member of Temple Beth El, the Geriatrics Society, the Cardiological Society, and the Michigan Heart Association.

Memorial contributions may be made in Doctor Ramsey's name to the Heart Fund.

Paul Frederick Stoller, MD
St. Johns

Paul Frederick Stroller, MD, who had practiced medicine in DeWitt and Fowler before moving to St. Johns in 1946, died August 28 at the age of 57.

Doctor Stoller received his medical degree from the University of Michigan in 1938 and was affiliated with Clinton Memorial Hospital, St. Johns. He was a general practitioner with a special interest in surgery. Doctor Stoller was also a Selective Service examiner for several years beginning in 1940.

He was a past president of the Clinton County Medical Society. He was affiliated with the Chamber of Commerce and the Exchange Club. Doctor Stoller was a member of Nu Sigma Nu medical fraternity.

INDEX TO ADVERTISERS

Arch Labaratories 944
Arnar-Stone Laboratories, Inc. 933
Beecham-Massengill 972, 973
Brown Pharmaceuticals 957
Burraughs-Wellcome & Ca. 953, 977
Campbell Soup Co. 925
Classified Advertising 980
Cytology Labs 944
Darsey 928
Fisher Building 944
Geigy Pharmoceuticals 886
Homemakers, Inc. ....Cover III
Haspital Planning 981
Impart Matars 945
Inland Steel 960
Lilly, Eli & Co. 894, 974
Mead Johnson Labaratories 892, 893, 950, 951
Medical Pratective 967
Mercywood Haspital 970
Merrell Natianal 947, 948
Michigan State Medicol Society 890
Poythress, Wm. P. 889
Riker Laboratories 965
Roche Laboratories ....Cover II, 885, 961, Caver IV
Robins, A. H. Company 929, 930, 931
Scientific Sessians 934
Searle, G. D. & Co. 926, 927
Smith, Kline and French Loboratories 969
Squibb 971
Stratton, Ben P., Agency 891
Stuart Pharmaceuticals, Div. of Atlas Chem-Ind., Inc. ..954, 955
U. S. V. Pharmoceutical 958, 959
Upjohn Company 940, 941, 942, 962, 963
Walker Carp. and Ca. 935, 982
Wallace 964
Warner-Chilcott Laboratories 936, 937

With EVAC-U-GEN your patients with functional constipation can evacuate gently. This is highly desirable for those sensitive to harsh laxatives . . . particularly children, pregnant women, and geriatric patients

EVAC-U-GEN® *CHEWABLE VERY PALATABLE ECONOMICAL*

A highly-flavored and palatable tablet of yellow phenolphthalein, bismuth subcarbonate, bismuth subgallate in special base. Chewable. Bottles of 35 and 100. Adult Dose: Chew 1 or 2 tablets night or morning. Children (up to age 10): 1/2 tablet. A citrus drink taken with tablet will stimulate action.

PRECAUTION: Do not use when symptoms of appendicitis are present and discontinue use if skin rash appears. Dependence on laxatives can result from continued use.

WALKER, CORP & CO., INC. Syracuse, New York 13201

Michigan Medicine

Breaking News: Deadline, Oct. 5
October 1971, Volume 70, Number 25
Michigan State Medical Society

MSMS offers PG series

The MSMS Postgraduate Education Committee will offer a series of 16 programs this fall statewide. In most cases, the programs involve a clinical session in the afternoon, during which doctors are able to discuss specific patients with their colleagues, and an evening formal lecture. The following list of cities and dates will show the programs:

Programs will be held October 12, Battle Creek; October 14, Alpena; October 18, Muskegon, Houghton, and Sault Ste. Marie; October 19, Ironwood and Escanaba; October 20, Iron Mountain and Menominee; October 21, Marquette; October 27, Berrien County (Benton Harbor) and Grayling; November 2, Traverse City; November 11, Petoskey; and November 12, Midland. The first program was October 1 at Holland.

Speakers from the University of Michigan Medical School include Doctors David G. Anderson, John G. Batsakis, Samuel J. Behrman, Roger Boles, Robert C. Borer, Joseph C. Cerny, Reed O. Dingman, F. Bruce Fralick, E. Richard Harrell, Herbert Kaufer, Richard O. Kraft, Peter J. Lynch, Gerald A. O'Connor, Ernest W. Reynolds, Jr., William R. Solomon, Walter P. Work.

Physicians from the WSU School of Medicine include Benjamin M. Lewis, David C. Nolan, and Francis M. Wilson. Speakers from MSU College of Human Medicine are Dan C. English and Tom Johnson.

New Blue Shield-Blue Cross service center dedicated

The Michigan Blue Cross and Blue Shield Service Center—a three-building, 11.5-acre complex east of downtown Detroit—was officially dedicated Sept. 16 before a large gathering of employes, health care leaders from around the country, and community leaders from Detroit and Michigan.

Built at a cost of $32 million, the complex will improve service to five million members and the providers of care. Blue Shield President John C. McCabe and Blue Cross President Bennett J. McCarthy pointed out "the only way to centralize operations was to build new home offices. Besides this major accomplishment, and the savings that result, the Service Center is designed for efficiency and functionalism. The service center was constructed without affecting the rates of our

CAPSULES

Western Michigan physicians are invited by the Kent County Unit of the Michigan Heart Association to its Annual Professional Symposium on Wednesday, November 3, 1971 at the Hospitality Inn, Grand Rapids. Subjects will include "Physiology, Type and Principles of Cardiac Pacing", "Current Indications of Cardiac Pacing", "Management of Pacemaker Patients", and "Development and Future Application of Pacemakers". Among the speakers will be Richard D. Judge, MD, Clinical Professor of Postgraduate Medicine, the University of Michigan Medical Center, Ann Arbor.

* * *

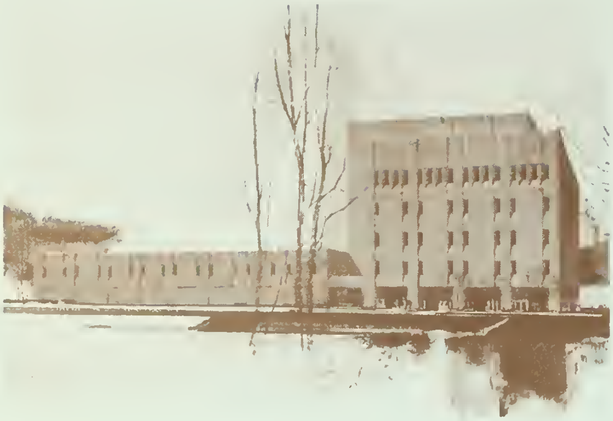
A forum on the future of medical assistants, with special emphasis on education, will highlight the 15th annual convention of the American Association of Medical Assistants, Nov. 9-13 at the Marriot Hotel in Atlanta, Ga. A team from the Atlanta Regional Nephrology Center will discuss "The Right To Die: To Walk Not Alone". Some members of the Michigan chapter plan to attend.

* * *

On November 3, 1971 the Detroit Orthopaedic Clinic, 5447 Woodward, Detroit, will present an all-day clinic on Developmental Anomalies featuring Dr. J. Gordon Petrie. Dr. Petrie is Chief of Surgery at Shriner's Hospital for Special Surgery and Surgeon in Charge of Orthopaedics at Royal Victoria Hospital, Montreal, Canada. Topics will be Blount's Disease, Perthe's Disease, Coxa Vara and Slipped Capital Femoral Epiphysis. For reservations call 382-1100.

* * *

Recently elected officers of the Michigan Dermatological Society for 1971-72 include President Wil-



An architect's sketch of the Meyer L. Prentis Cancer Center, a new research and administrative building of the Michigan Cancer Foundation. The state's first self-contained laboratory for work with human viruses will be located on the top floor of the five-story structure. It's expected the building, now under construction, will be completed by the winter of 1972. Dr. Jerome P. Horwitz, Michigan Cancer Foundation Scientific Director, explained that while there are other virus research centers in Michigan, they are not designed specifically for human virus research. He said, "Virus causation of breast (mammary) cancer and leukemia in mice is established and comparable mechanisms appear to be operative in the human form of the disease."

CAPSULES/Continued

liam B. Taylor, MD, Ann Arbor, President-elect, Harold Plotnick, MD, Detroit, Secretary-Treasurer, Ralph J. Coskey, MD, Oak Park, and Recorder, Neldagae Chisa, MD, Huntington Woods.

* * *

The Michigan Diabetes Association will hold its Annual Clinical Meeting October 13, 1971, featuring two sessions. The afternoon session will take place in Zuckerman Auditorium, Sinai Hospital, Detroit and the evening session will meet in the Northwest Room, Stouffers Northland Inn, Southfield. Chairman for the event is Marjorie Peebles-Meyers, MD. Several topics related to the care and complications of the diabetic patient will be discussed; a panel discussion will also be featured, during which a number of problem cases will be examined by experts in the field. Robert F. Bradley, MD, Medical Director, Joslin Clinic, Boston, will address the audience on the topic "Oral Hypoglycemic Agents: Friend or Foe of the Diabetic?" during the evening session of the meeting.

* * *

The Michigan State Medical Assistants Society held a Leadership Training Seminar, entitled "At the Helm of Leadership" on September 25. Speakers at the event included David W. Hills, MD, who addressed the audience on the topic "Coming Trends in Med-

subscribers. The financing was made possible through bank borrowings and the use of reserves."

The three-story, support-facility houses one of the largest data processing centers in the metropolitan Detroit area. More importantly, note the two presidents, "the location of all data processing under a single roof means increased efficiency of operation, and better service."

Family practice clubs start fall activities

The Michigan Academy of General Practice announces that the Wayne Family Practice Forum, October 20 at the Wayne County Medical Society, Detroit, will feature the theme "A Funny Thing Happened on the Way to the Office." The Family Practice Club at the U-M discussed "Is General Practice *Really* Dead?", September 29, and the MSU Family Practice Club program about "The Seductive Patient" was October 8. The three clubs report an exceptionally enthusiastic response over the past two years.

State sets re-registration fee at $25

Re-registration fees for medical doctors will be $25, effective Jan. 1, 1972, under legislation enacted in August and signed by the Governor in September.

The $25 re-registration fee also was extended to osteopathy, dentistry, optometry, and chiropractic.

The amendment to the medical practice act made two basic changes: (1) The fee increase from $5 to $25; (2) The change in date for re-registration from March 1 to January 1, and a $35 late registration penalty.

John Wellman, MD, executive secretary of the State Board of Registration in Medicine, announced notice of the change will be mailed to all medical doctors.

Regional meeting of internists held

Five scientific sessions covering research and clinical reports on new findings and techniques in disease diagnosis and treatment highlighted the 18th annual regional meeting of internists in Michigan Sept. 16-18. Sponsored by the American College of Physicians (ACP) and the Michigan Society of Internal Medicine, the Detroit meeting was one of 40 regional meetings of the College.

Among highlights were 10 "Meet the Expert" discussions, held simultaneously; subjects included diabetes, kidney diseases, new knowledge in joint diseases, stroke, chemical treatment of cancer, and emotional disturbances.

Muir Clapper, MD, ACP Governor of Michigan and professor of medicine at Wayne State University School of Medicine, directed the planning.

Michigan Tuberculosis and Respiratory Disease schedules meeting

The Annual Meeting of the Michigan Tuberculosis and Respiratory Disease Association will take place at the MSU Kellogg Center, October 20 and 21. Included among the scheduled events are the Board of Trustees meeting, the annual business meeting and a number of presentations concerning aspects of respiratory disease. Robert Gregg, MD, Children's Hospital, Detroit, will speak on the topic "Atypical Infections of Children." A number of special awards will be presented at the MTRDA-MTS joint luncheon to be held on October 21.

Hospital accreditation workshop

The workshop on Joint Commission Accreditation Standards to be held Nov. 5 and 6 at the Ramada-Metro Inn near the Detroit Metropolitan Airport will be of special interest to hospital administrators, chiefs of staff, and members of hospital boards. All registration requests should be addressed to the Michigan Hospital Association, 2213 E. Grand River Ave., Lansing, Michigan 48912.

Invite public to Detroit forum

Planning for the first symposium to focus on care of the terminal cancer patient has been completed by the Michigan Cancer Foundation and six metropolitan Detroit area professional groups. The symposium will be held Wednesday, October 13, 1971, at 7:30 p.m. in the auditorium of the Ford Motor Company's World Headquarters Building, Dearborn. Contact the Michigan Cancer Foundation, Downriver Unit, 2729 Fort Street, Wyandotte, (282-5818) for details.

icine," Robert Lang, MD, who spoke on the subject "Working Wife," and Gene Maddock, MD, who discussed "Radio Isotopes in Medicine." All three physician speakers are from Berrien County.

* * *

Stewart B. Siskin, Doctor of Pharmacy has been named Supervisor of Drug Information Services at the University of Michigan Hospital Pharmacy. Dr. Siskin was a pharmacy intern and staff pharmacist at Buffalo General Hospital, Buffalo, New York. He has served a residency in Hospital Pharmacy at the University of Michigan Hospital and received his Doctor of Pharmacy degree from the University of Michigan College of Pharmacy in December 1970. Dr. Siskin has more recently been affiliated with the Hospital Pharmacy at St. Joseph Mercy Hospital in Ann Arbor, Michigan. Dr. Siskin is a member of the American Pharmaceutical Association, American Society of Hospital Pharmacists, Michigan State Pharmaceutical Association, and Southeastern Michigan Society of Hospital Pharmacists. Dr. Siskin is married and lives at 2200 Fuller Road, Ann Arbor, Michigan.

* * *

Mary Ellen Fenn, MD, has been designated as the first Norman F. Miller Scholar in the Department of Obstetrics and Gynecology at The University of Michigan Medical Center for a two-year period beginning July 1971. This Scholar Fund was established by contributions from physicians trained by Doctor Miller, emeritus professor and past chairman of the department at the Medical Center, and from interested friends and patients.

Doctor Fenn will be studying in the field of gynecologic oncology (cancer) with the additional support of a National Cancer Institute Clinical Cancer Training Grant.

She attended the U-M and interned at St. Luke's Hospital in San Francisco. After two years of training in pathology, she completed her residency training in obstetrics and gynecology at the University in June.

MSMS at work...

...RESEARCHING LATEST ECONOMIC FACTS

The newest staff department of MSMS is the Bureau of Economic Information. Established by a resolution of the 1970 Annual Session, its immediate goal is to gather information in response to increasing need for facts and figures.

The Bureau, which will be a continuing staff service, is headed by John Anthony, former senior financial analyst at William Beaumont Hospital, Royal Oak.

Currently, two research projects are being conducted. A survey on overhead costs of medical practice, mailed to all members of MSMS, is now being correlated by computer and key-punch techniques. An unusually good response of almost 20 percent indicates that Michigan doctors are vitally interested in this economic area and were willing to answer a relatively time-consuming questionnaire.

A second, related project is now being carried out. Doctors have been asked to fill out a fee survey, according to specialty areas, and response is over 30 percent at this time.

Resultant data from these and other projects will be made available to MSMS members and component medical societies, and will be utilized in MSMS legislative and socio-economic efforts.

One future project will be a series of attitudinal surverys on methods of health care delivery.

Also underway is a probe of the values that doctors place on various medical procedures in the fields of medicine, surgery, pathology, and radiology. Section chiarmen and specialty society leaders are assisting the Relative Value Study Committee, which will report to the October 1971 House of Delegates.

Three physicians serve as advisors to the Bureau: Dale L. Kessler, MD, chairman of the Medical Socio-Economics Committee; Brooker L. Masters, MD, chairman of the Planning & Priorities Committee, and Robert E. Rice, MD, chairman of the Committee on Governmental Medical Care Programs.

EDIGRAMS
TE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
NOV 1 5 1971

ichigan Medicine
October 25, 1971, Volume 70, Number 26
Michigan State Medical Society

Social Services announces end of 10% reduction in payments

As of Sept. 29 the checks doctors receive for Medicaid services processed for payment will represent the full Medicaid payment.

Michigan State Social Services Department Director Bernard Houston, announced the change to the MSMS House of Delegates through a special telegram to Vernon V. Bass, MD, Saginaw, speaker of the House, who read the telegram into the minutes of the annual meeting of the House Oct. 3-5 in Grand Rapids.

Subsequently, all Michigan doctors were informed through a letter mailed by Blue Shield Oct. 8.

Social services budget final unresolved issue

The state legislature recessed until Tuesday, Oct. 26, leaving disposition of the social services department budget (including Medicaid) unresolved.

Senate and House conferees were $31,200,000 apart when talks broke off and the legislature adjourned. Line item for Medicaid physician fee is $51,533,600 in the house version; $50,045,000 in the senate version.

Among health issues adopted in other budget bills which were passed and sent to the governor for his signature was an allocation to the public health department of $23.9 million, up $1.2 million from last year. Included is $320,000 for a new Health Care Administration for surveillance of Medicaid services, to be matched by $900,000 federal funds, and $2,000,000 for maternal and infant care including experimental pre-natal and post-natal clinic services in Detroit.

The department of mental health budget is $210,900,000, up $12.7 million from last year. Included is $3 million for drug abuse programs, $19 million for community mental health services, $82.1 million for institutional mentally ill, and $73 million for institutional mentally retarded.

The proceedings will be printed in December as part of **Michigan Medicine.**

Unofficial summary of house action

By Vernon V. Bass, MD
Speaker
MSMS House of Delegates

This summary report of the proceedings of the 106th (1971) House of Delegates of the Michigan State Medical Society which met Oct. 3-5, 1971, is *UNOFFICIAL.*

The following decisions of the House as the legislative body of MSMS shape the policy and course of the Michigan State Medical Society for 1971-72:

Elections

The House of Delegates elected the following MSMS Officers, Councilors, and American Medical Association Delegates and Alternate Delegates:

Officers (to Sept. 1972)

President-Elect	John J. Coury, MD, Port Huron
Treasurer	John R. Ylvisaker, MD, Pontiac
Assistant Treasurer	Ernest P. Griffin, Jr., MD, Flint
Secretary	Kenneth H. Johnson, MD, Lansing
Assistant Secretary	Ross V. Taylor, MD, Jackson
Speaker of the House	Vernon V. Bass, MD, Saginaw
Vice Speaker of the House	James D. Fryfogle, MD, Southfield

Councilors (to Sept. 1974)

1st District	Louis R. Zako, MD, Allen Park
7th District	James H. Tisdel, MD, Port Huron
8th District	William A. DeYoung, MD, Saginaw
10th District	Robert C. Prophater, MD, Bay City
12th District	Raymond Hockstad, MD, Escanaba
15th District	Sydney Scher, MD, Mt. Clemens

Delegates to the American Medical Association (through December, 1973):

Robert E. Rice, MD, Greenville
Otto K. Engelke, MD, Ann Arbor
John W. Moses, MD, Detroit
Paul T. Lahti, MD, Royal Oak

Alternate Delegates to the American Medical

Association (through December, 1973) in order of seniority:

Frank B. Walker, II, MD, Grosse Pointe
Donald T. Anderson, MD, Kingsford
Richard McMurray, MD, Flint
Brooker L. Masters, MD, Fremont

Matters of general state society business

(1) Presented Certificates of Commendation to:

Eugene R. Elzinga, MD, Marquette
Tommy N. Evans, MD, Detroit
John V. Fopeano, MD, Kalamazoo
Leland E. Holly, Sr., Muskegon
James M. Kennary, Sr., MD, Detroit
Lionel F. Swan, MD, Detroit

(2) Amended the Constitution and Bylaws by:

a. Authorizing that the Secretary, Assistant Secretary, Treasurer, and Assistant Treasurer shall be nominated by The Council and elected by the House of Delegates.

b. Authorizing that the Chairman of the Delegates to the AMA, or another member of the delegation, designated as his substitute, shall serve on The Council as an ex-officio member.

Reports of officers

(1) President's Report—Harold H. Hiscock, MD Approved President's recommendation that The Council investigate reasons for exodus of medical doctors from this State.

Commended the President on the completion of a productive and rewarding year.

(2) President-Elect's Report—Sidney Adler, MD Commended the President-Elect on his discussion of the many problems facing the Medical Society.

(3) Report of Michigan Delegation to the American Medical Association—Donald N. Sweeny, Jr., MD.

Referred to the MSMS Council the delegation's request for instructions as to whether a section on House Officers be established under the Bylaws of the AMA and whether SAMA Delegates should be given full rights and privileges of the AMA House of Delegates.

Suggested to the delegation that the proposed AMA Constitutional Convention not be undertaken because it would be too expensive.

(4) Treasurer's Report—John R. Ylvisaker, MD

The House of Delegates approved the following section of the report of the Reference Committee on Ways and Means: "Mr. Speaker, your Committee then considered the Treasurer's Report. There is only one recommendation in the Treasurer's Report. This has to do with the allocation of a portion of the surplus. Your Committee felt that there is a committee of The Council whose specific purpose is to determine priorities. In the interest of not subverting the activities of this priority committee, your Committee recommended disapproval of the Treasurer's Recommendation."

Annual report of The Council

Returned the proposal for a Medical Foundation to The Council for revision and recommended that the final version of the instruments of the proposed foundation be considered by the House of Delegates at another meeting.

Approved the Financial Report for the period ending August 31, 1971 and commended Doctor Griffin and the Finance Committee of their constant fine work.

Approved a suggestion from the Reference Committee on Ways and Means that the fiscal year be changed to closer coincide with the Annual Meeting.

Resolutions

Res. 1—Quorum for MSMS House of Delegates. Disapproved.

Res. 2—Medicaid Performance, Surveillance, and Utilization Report System. Disapproved.

Res. 3—Appointment of Committee to Consider Two House Meetings a Year. Substitute resolution adopted in lieu of Resolutions 3 & 4.

"RESOLVED: That there be two meetings of the House of Delegates—one in the spring and one in the fall."

Res. 4—Change of Dates for Annual Meeting of the House of Delegates. Substitute resolution adopted in lieu of Resolutions 3 & 4. See Resolution 3.

Res. 5—Establishment of Michigan State Medical Society Malpractice Judicial Panel. No action.

Res. 6—Establishment of a Uniform Fee Schedule for Medicaid Payment. Substitute resolution adopted in lieu of Resolutions 6 & 20. "RESOLVED: That The Council do everything in its power to have established a revised Medicaid payment system which would include a Uniform Fee Schedule, and that the most recently approved Michigan Relative Value Scale be used to determine the relative value payment, and that future adjustments in payments be made in relation to the alteration of costs of delivery of health services on an annual basis."

Res. 7—For Continuing Physician Education for Reregistration. Adopted as amended. "RESOLVED: That this House of Delegates instruct the Speaker to appoint an ad hoc task force to review the proposal submitted by the Postgraduate Education Committee and that this ad hoc task force undertake to revise or modify that proposal as it deems appropriate and submit a detailed series of final recommendations

Res. 47—Exoneration of a Physician from Conspiracy in the Assassination of a President. Adopted as amended. "RESOLVED: That the MSMS House of Delegates go on record in favor of urging our U.S. Senators to continue in this pursuit to obtain complete exoneration of Dr. Samuel A. Mudd by the President of the United States and the Congress of the United States."

Res. 48—Home Health Services Under Medicare. Adopted with the request that The Council refer this matter to the Legislative Committee for possible implementation. "RESOLVED: That the House of Delegates of the MSMS go on record as reaffirming its support of the principles and necessity of a fully implemented home health care program under Medicare. RESOLVED: That Certificate of Need for the delivery of Home Health Care Services to patients be the prerogative of the practicing physician. RESOLVED: That copies of this resolution be sent to all parties in Washington and Lansing who are concerned with this matter and who might influence its future course."

Res. 49—Membership Priorities. Adopted as amended. "RESOLVED: That the Chairman of The Council instruct staff of MSMS to prepare a list of current medical issues and problems and to poll the members of the MSMS periodically to determine which of these issues are of primary concern to them."

Res. 50—$25.00 Re-Registration Fee. Disapproved.

Res. 51—Nomination of Members of the Corporate Body of Blue Shield. Disapproved.

Res. 52—Physician Relations with Communications Media. Adopted as amended. "RESOLVED: That recent liberalization of the code of ethics be publicized to the members of the profession, and that the MSMS encourage all physicians to contact the local outlets of the various communications media and make arrangements to utilize these medias for the advancement of information on the present system of delivery of medical services, and that these matters should be accomplished with consent of the local medical society."

Res. 53—Recognition of Physician's Services to MSMS. Adopted as amended. "RESOLVED: That the Speaker of the House of Delegates be requested and empowered to develop a suitable means of recognition for these physicians and their services, and that where appropriate, this recognition may be made retroactive."

Res. 54—Emigration of Medical Graduates. Adopted. "RESOLVED: That the House of Delegates authorize the Speaker to appoint an ad hoc committee composed of academic and practicing physicians, and medical students to investigate the causes of this loss to the people of the State of Michigan. RESOLVED: That the committee submit a series of specific recommendations to help minimize this loss. This report should be presented to The Council and 1972 House of Delegates."

Res. 55—Change of DSR Reporting Forms for Blue Shield. Adopted in concept and referred to The Council for further study and efforts at implementation. "RESOLVED: By the members of the MSMS that Michigan Blue Shield be informed that henceforth the physician will supply only the name, policy number, service rendered, the date and place the service was rendered, and the fee charged for any subscriber."

Res. 56—Surveillance and Utilization Review. Adopted as amended. "RESOLVED: That MSMS continue to cooperate with the Medicaid Performance, Surveillance and Utilization Report system through the practicing physician participation in its Advisory Committee. RESOLVED: That these members be appointed by The Council, continue to serve at The Council's pleasure, and continue to report back to The Council."

Res. 57—Smoking during Meetings of the Michigan State House of Delegates. Disapproved.

Res. 58—Appointment of Physician Members to the Corporate Body of Blue Shield. Disapproved.

Res. 59—Drug Abuse Control. Adopted as amended. "RESOLVED: That the MSMS urge every physician to become involved locally, on state and national levels in the development of the solution to the problem, and that MSMS work with our Governor's Drug Committee, and other legislative agencies in the development of legislation designed toward needed drug control and education of the public."

Res. 60—Medicaid Provision for Preventive Health Care Services. Adopted as amended. "RESOLVED: That The Council of the MSMS take appropriate steps to urge the Legislature and the Department of Social Services to include in the Medicaid program preventive health care services such as physical examination, pre-school examination, well-baby visits, necessary immunizations and sterilization."

Res. 61—Delay by Michigan Blue Shield in Payment of Physician's Services Rendered. Adopted. "RESOLVED: That MSMS request on behalf of its members, that accounts for services rendered by physicians and surgeons, be paid in a reasonable length of time by Michigan Blue Shield; similar to the present payment by Michigan Blue Cross of the accounts rendered by hospitals."

Res. 62—Support of Proposed Policy Declaration on Maintenance of Health and Medical Care of National Chamber of Commerce of the United States. Adopted as amended. "RESOLVED: That the MSMS House of Delegates in general appreciates the philosophy of the proposed Policy Declaration of the Chamber of with the Michigan Osteopathic Association, Michigan Department of Public Health, Michigan Hospital Association, Michigan Osteopathic Hospital Association, and other interested parties, ways and means of retarding the rapid rise of hospital construction cost."

Res. 31—Reporting Medical and Surgical Care to Insurance Companies. Adopted as amended. "RESOLVED: That the MSMS explore ways of setting up a method of direct dialing the information needed to both public and private insurance companies (as is now done when patients apply for insurance and medical history is needed). RESOLVED: That this be done utilizing the AMA Current Procedural Terminology code."

Res. 32—Laboratory Service for Comprehensive Drug Abuse Treatment Programs. Adopted as amended. "RESOLVED: That the MSMS encourage the appropriate federal, state and local agencies to support the funding for comprehensive services to include laboratory services for the drug addicts enrolled in hospital and other approved community comprehensive drug abuse treatment programs."

Res. 33—Application of the "Good Samaritan" Law to Physicians Forced to Service the Emergency Room by Hospital Bylaws. Disapproved.

Res. 34—Abolition of Seven Year Limitation of Service Connection Classification of Veterans Disabled by Multiple Sclerosis. Disapproved.

Res. 35—Revision of Present Geographical Determination of Michigan Variable Fees. No action.

Res. 36—Unsatisfactory Federal Narcotic Registration Form. Adopted. "RESOLVED: That the MSMS delegates to the AMA be directed to urge the American Medical Association to use every means at its disposal to correct this bureaucratic monstrosity and to insist that a re-application form be designed that is easily filled out and uniformly comprehensible to the honorable physicians of this great nation."

Res. 37—Physician Participation with Third Parties. Adopted and referred to The Council for implementation. "RESOLVED: That the MSMS develop a negotiating mechanism to represent the physicians' views."

Res. 38—Definition of a Specialist. Adopted as amended. "RESOLVED: That the MSMS House of Delegates adopt the following definition of a specialist: A specialist shall be a physician (1) certified by the appropriate specialty board, approved by the American Board for Medical Specialties and by the American Medical Association Council on Medical Education, or (2) practicing as a specialist not possessing a specialty board certificate, but has completed an approved residency in that specialty, or (3) is recognized as a specialist by the staff of the hospital in which he practices provided it is an accredited hospital, and he is a physician who is eligible for certification by his specialty board."

Res. 39—Higher Reimbursement by Blue Shield for Outpatient Surgery Performed in the Surgeon's Office. Adopted as amended. "RESOLVED: That the MSMS House of Delegates in the interest of equity strongly support the concept that third party payors agree to pay an *additional* facility fee for surgical procedures performed in a surgeon's office."

Res. 40—Recommendations for Peer Review. Adopted as amended. "RESOLVED: That the review committee should be composed entirely of local physicians appointed by their respective hospital medical staff or county society, and to respect the confidentiality of medical records and physician-patient relationship. RESOLVED: That in the event that a satisfactory solution to a review is not reached at the hospital staff level that it may be appealed to the county or regional review committee, or then when and if established to the State Peer Review Committee. RESOLVED: That members of these review boards should be only physicians appointed or elected by physicians from their respective areas of representation such as county, regional or state."

Res. 41—Blue Cross-Blue Shield Coverage for Medical Students. Adopted and referred to The Council for study and feasibility. "RESOLVED: That the MSMS study arrangements for the extension of the group medical program (Blue Cross-Blue Shield) to the medical students of the Medical Schools of the state (MSU School of Medicine, U of M School of Medicine, WSU School of Medicine)."

Res. 42—Direct Payment to Medicaid Patients. Adopted as amended. "RESOLVED: That The Council of MSMS seek Michigan State Legislative and Executive Office support for the option of either direct billing or assignment under Group II Medicaid Assistance."

Res. 43—Direct Payment of National Health Insurance Funds to Patients. Adopted as amended. "RESOLVED: That The Council of MSMS recommend that any future federal health program permit direct billing of patients by physicians and allow federal payment of funds to patients when patient and physician agree."

Res. 44—National Health Insurance Legislation. No action.

Res. 45—Elimination of Delegate to Councilor. Disapproved.

Res. 46—Insurance Coverage for Voluntary Sterilization. Adopted Resolution 65 as amended as a substitute for Resolution 46. See Resolution 65.

for consideration by the 1972 House of Delegates."

Res. 8—Drug Abuse. Adopted as amended. "RESOLVED: That the Michigan State Medical Society urge a voluntary statewide moratorium on the prescription of amphetamines for diet control."

Res. 9—Proxy Vote. Disapproved.

Res. 10—Restructure of MSMS Councilor Districts. Disapproved.

Res. 11—Responsibilities of MSMS President. Disapproved.

Res. 12—Relation of MSMS with Michigan Congressmen. Adopted. "RESOLVED: That this House of Delegates reaffirm authorization for the officers of the Michigan State Medical Society to meet with the Michigan members of Congress and offer overall counsel and leadership within proposed national health programs."

Res. 13—Summary of Medical Laws. Adopted as amended. "RESOLVED: That The Council of MSMS study available material and take appropriate action."

Res. 14—Homicide Prevention. Adopted as amended. "RESOLVED: That the MSMS recommend to our governmental bodies that effective controls be placed on the assembly, manufacture and distribution as well as possession of hand guns and that legislation to this end be supported.

RESOLVED: That copies of this resolution be distributed to the Executive Office of the State of Michigan, the Legislature and appropriate local units of government."

Res. 15—Physician Discrimination. No action.

Res. 16—No Fault Malpractice Insurance. Adopted as amended. "RESOLVED: That the MSMS investigate the feasibility of a no-fault insurance system."

Res. 17—Computer Committee. Adopted as amended. "RESOLVED: That The Council establish a continuing committee charged with keeping abreast of developments in this field and advising The Council on need for legislation, changes in accreditation requirements and any other matters which would logically come before the committee."

Res. 18—Studded Snow Tires for "Emergency" Vehicles. Disapproved.

Res. 19—Institution of Legal Action against State of Michigan. Substitute resolution adopted in lieu of Resolutions 19, 21, and 27. "RESOLVED: That MSMS reaffirm its commitment to require the fiscal intermediary to compensate, in accordance with the existing law, the provider of medical service at his usual customary and reasonable rate."

Res. 20—Contract with Michigan Department Social Services for Medicaid Services. Substitute resolution adopted in lieu of Resolutions 6 & 20. See Resolution 6.

Res. 21—Prohibition of Inequitable Prorating of Payment for Medicaid Services. Substitute resolution adopted in lieu of Resolutions 19, 21 & 27. See Resolution 19.

Res. 22—Lansing as the Annual House of Delegates Meeting Site. No action.

Res. 23—Effort to Repeal or Modify MMS Enabling Act. Disapproved.

Res. 24—Revision of Pharmacy Rules. Recommended this resolution be forwarded to the Liaison Committee with Michigan State Pharmaceutical Association for study and appropriate action.

Res. 25—Defense of Physician by Michigan State Medical Society. Adopted as amended. "RESOLVED: That MSMS through Peer Review shall review and if indicated support the physician in any action in which a third party participates to prevent the physician from obtaining his usual fee, provided the case has been reviewed and the physician supported by his local peer review committee."

Res. 26—Non-participation in Blue Shield Provider Contracts. Disapproved.

Res. 27—Payment of Usual and Customary Fee by Medicaid Fiscal Intermediary. Substitute resolution adopted in lieu of Resolutions 19, 21 & 27. See Resolution 19.

Res. 28 — Consumer Committee. Adopted as amended. "RESOLVED: That the MSMS request each of its component societies to appoint and activate a consumer committee composed of at least five members. Appropriate members of the Medical Society shall act as advisors to this committee, but not as members; both shall create a two-way communication pathway between the consumer and the profession. RESOLVED: That the MSMS choose from the various consumer committees set up across the state the best possible representative talent as members of a state consumer committee. The state committee shall consist of at least twelve (12) members to act in a similar manner on a state level. RESOLVED: That all of these consumer committees both local and state be encouraged to represent the Medical Society and its members in their relations with the public."

Res. 29—Discrimination against Physicians and Women in Membership on County Hospital Boards. Adopted as amended. "RESOLVED: That MSMS explore the strategies of repeal of this section of PA 350 (1913)."

Res. 30—Increasing Hospital Construction Costs. Adopted as amended. "RESOLVED: That the MSMS propose to investigate, in conjunction

Commerce of the United States. RESOLVED: That The Council of the MSMS be instructed to follow the development of this proposed Policy Declaration with the intent of supporting appropriate action."

Res. 63—Medical Education Community Orientation Project. Adopted. "RESOLVED: That the MSMS strengthen its support of the MECO Project by encouraging wider participation of community hospitals and physicians, seeking out broader financial resources for the program, and by expanding professional and public awareness of the Project through the media, county medical societies, and concerned community groups."

Res. 64—Shortage of Physicians. Adopted as amended. "RESOLVED: That The Council of MSMS be instructed to initiate a campaign to inform the public of its goals of obtaining adequate numbers of well trained physicians for Michigan. RESOLVED: That the MSMS reinforce its support of the Michigan Health Council Physician Placement Program. RESOLVED: That The Council of MSMS be instructed to urge the Michigan Legislature to support a further increase in class size in the medical schools of this State. RESOLVED: That The Council continue its dialogue with the medical schools and the medical students with the objectives of increasing the retention of graduates in Michigan and expanding the development of family practice."

Res. 65—Payment for Voluntary Sterilization. Adopted as amended as a substitute for Resolution 46. "RESOLVED: That MSMS reaffirm its policy of third party payment for elective sterilization—in-patient or out-patient. RESOLVED: That a copy of this resolution be sent to each Blue Shield Board Member and to the Michigan Insurance Commissioner."

Res. 66—Abortion Reform Petition Drive. Adopted as amended: "RESOLVED: That MSMS House of Delegates endorse the petition drive to initiate legislation for medical control of abortion."

Res. 67—Support of Abortion Reform Referendum in 1972. Disapproved.

Res. 68—Financial Aid to Medical Students. Disapproved.

Re-registration fee rise not effective until 1973

An Attorney General's ruling has declared the increase in re-registration fees from $5 to $25 is not effective until 1973.

The ruling found the new law was effective 90 days after the sine die adjournment of the 1971 Legislature. Thus, the fee increase could not take effect before Jan. 1, when re-registration fees are due.

In other words, physicians and surgeons will pay $5 for re-registration on Jan. 1, 1972, and $25 for re-registration Jan. 1, 1973, and thereafter. The Board of Registration in Medicine will mail formal notices of the ruling to all Michigan licensed MDs.

State takes over Medicaid administration

R. Bernard Houston, director, State Department of Social Services, announced Friday, Oct. 15, that the state will assume from Blue Shield and Blue Cross the responsibility for administering Michigan's Medicaid program.

Until now, the "Blues" have been administering the program for welfare and medically indigent patients, on a contractual agreement with the state.

Houston said the transition to state operation will take more than a year to accomplish, though others speculate it will occur by next April. Further information on how the state will coordinate with physicians will be forthcoming, he said.

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.

© 1971 Michigan State Medical Society.

Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

Second Class Postage Paid at East Lansing, Mich.
and at additional mailing offices.

UNIVERSITY OF CAL
LIBRARY SCH OF MED
THIRD & PARNASSUS AVE
SAN FRANCISCO CAL 94122

EDIGRAMS

TE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
NOV 22 1971

Michigan Medicine

October 30, 1971, Volume 70, Number 27
Michigan State Medical Society
Reading Time: 2 Mins. 40 Seconds

PROVAL OF A PLAN for Michigan Blue Cross-Blue Shield to take over the troit Community Health Association is expected Nov. 6 when the delegates the UAW-supported CHA will meet to consider the details of a merger. eliminary plans were announced Oct. 27 for "the Blues" to take over the A and continue to provide its 69,000 members with hospital and medical rvice under an expanded group practice to be known as the "metropolitan ogram." The agreement is subject to the final approval of the Michigan surance Bureau. Assumption of the CHA health plan by "the Blues" is pected to provide Blue Cross-Blue Shield with an operating unit that n serve as a pattern for future comprehensive health care plans. The w plan may set the stage for development of prepaid group practice ograms across the state.

SITE VISITS TO NEW TYPES of government medical care programs by staff of the Department of Government Relations have begun. Herb Mehler is researching and compiling costs, return, quality of care, fees and other pertinent data.

LPRACTICE DEFENSE ATTORNEYS from Detroit met Thursday, Oct. 28, with mbers of MSMS Ad Hoc Committee on Malpractice Legislation and MAOP&S lpractice Committee to discuss possible legislative activity.

THE MSMS DELEGATES to the AMA House of Delegates will confer November 10 to consider possible resolutions and other matters in preparation for the AMA meeting in New Orleans Nov. 28-Dec. 1.

E FIRST FALL MEETING of the new Council of Medical Specialty Societies ll be held at the MSMS building Nov. 17. The organization, formed this st year, gave its first progress report to the MSMS Council in July.

THE FDA MADE FINAL on Oct. 14 an agency requirement that prescription drugs composed of more than one ingredient combined in fixed dosage form (pill, capsule, teaspoonful) must offer the patient a therapeutic advantage over any of the components administered separately. The new policy affects up to 40 per cent of widely sold prescription drugs. Over-the-counter drugs (those sold without prescription) will be dealt with separately.

MS AND MICHIGAN DEPARTMENT of Public Health are joining in a special chigan Venereal Disease Control Project during November and December. e November issue of Michigan Medicine will include a four-page pull-out ction providing physicians with latest recommended diagnostic techniques d criteria and treatment schedules for venereal disease. MSMS activities e under the direction of the Committee on Public Health, chaired by Louis Zako, MD.

ONE OF THE FOUR nominees for the office of president-elect of the Wayne County Medical Society, Louis E. Heideman, MD, has withdrawn. The three remaining candidates are Sidney E. Chapin, MD, Benjamin Jeffries, MD, and Marjorie Peebles Meyers, MD.

WHEN HEW SECRETARY Richardson appeared Oct. 26 before the House Ways and Means Committee at a hearing on national health insurance, Rep. Martha Griffiths (D-Michigan) a sponsor of the Kennedy-Labor bill, told Mr. Richardson, "You know and I know that my bill is going to be law some day." He said, he hoped not. She said the GOP State Administration in Michigan dropped Blue Cross-Blue Shield as Medicaid carriers because it was cheaper to have the state serve as program administrator. She quoted a State Senator as saying one cannot expect organizations run by physicians to regulate physicians' fees.

CONCERNED GROUPS SOON will be invited to submit recommendations to the "Joint Committee on the General Practice of Medicine" created by the Michigan Legislature. The Committee will study ways to attract and retain more GPs.

EARLY PROGRAM PLANS are taking shape for the MSMS Annual Michigan Conference on Maternal and Perinatal Health, set for March 29-30 at the Olds Plaza Hotel in Lansing.

THE COMPREHENSIVE STATE Health Planning Advisory Council, at its recent meeting, voted to urge the governor to appoint an acting director or permanent director for the state health planning office. Several members said lack of a director hampered work of the advisory group.

THE AMA SCIENCE news editor expresses concerns about the articles written by some news reporters about the Oct. 25 JAMA article about a "morning after pill" for contraception. The JAMA article, which declared such pills safe and effective pointed out that this is an experimental procedure not approved for general use -- but this was not stressed by some news reports.

THE NEED FOR UNITY in the medical profession is stressed in an editorial in the American Medical News, October 11. The editorial quotes AMA Speake Roth, who in part appeals that all physicians "join together in the one great reasonably effective force which we have available to us and work within it to make it strong . . . "

THE TRUTH: Charges that the AMA spends great funds lobbying are far from the truth . . . ½ of 1% of the AMA funds goes for lobbying.

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1971 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

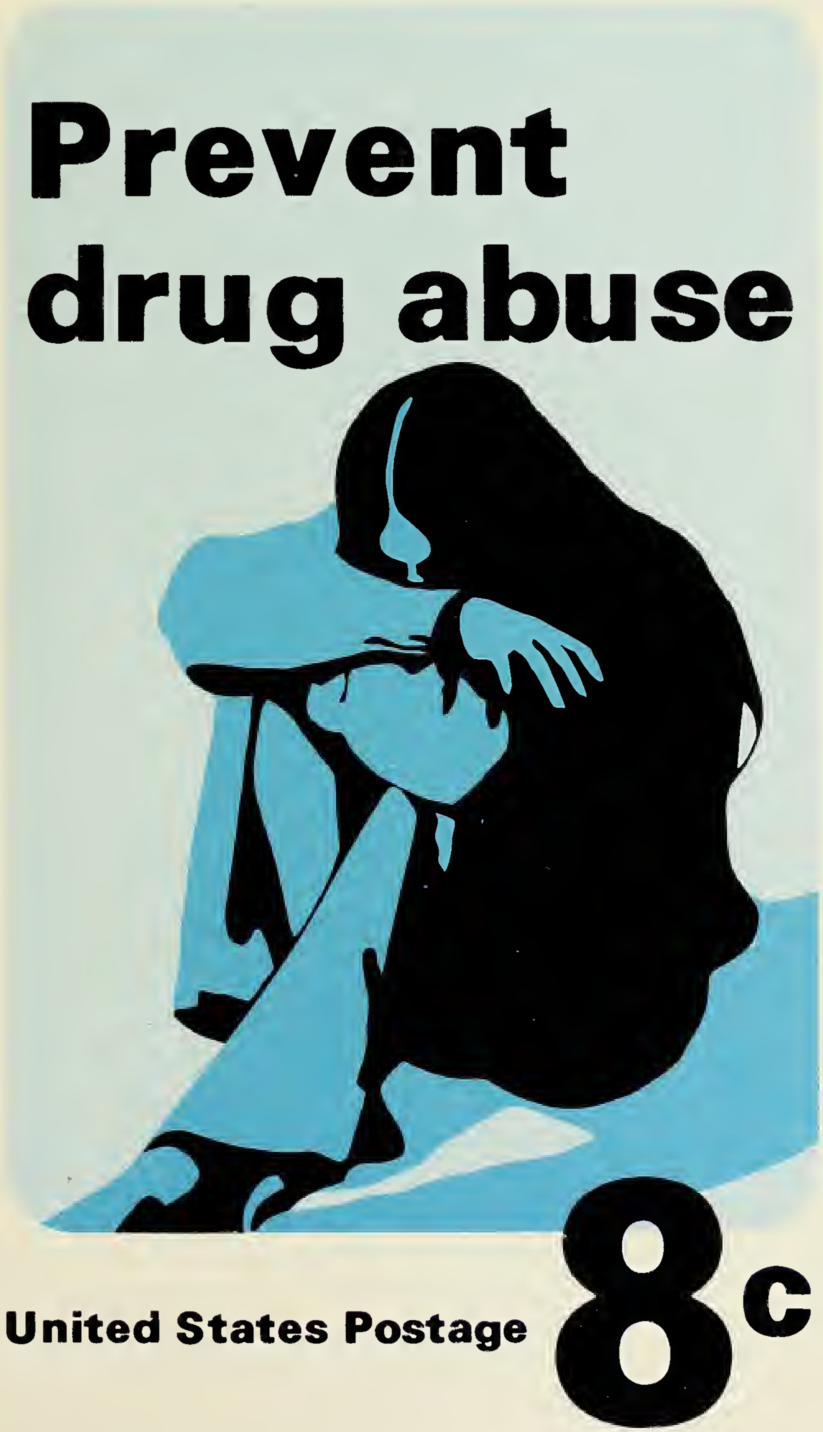
Second Class Postage Paid at East Lansing, Mich.
and at additional mailing offices.

UNIVERSITY OF CAL
LIBRARY SCH OF MED
THIRD & PARNASSUS AVE
SAN FRANCISCO CAL 94122

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY

NOV 30 1971

Michigan Medicine



The new stamp at left was issued this fall to draw public attention to the problems of drug abuse. A series of important scientific articles beginning on page 997 of this month's journal presents various aspects of drug abuse for study by Michigan's physicians. Be sure to read them.

Be sure to see findings of MSMS survey of medical practice costs, page 1040 inside.

Patients fell asleep quickl

Dalmane (flurazepam HCl) 30 mg reduced awake time—both before and after falling asleep - by fifty percent of pretreatment values in patients with insomnia.[1,2]

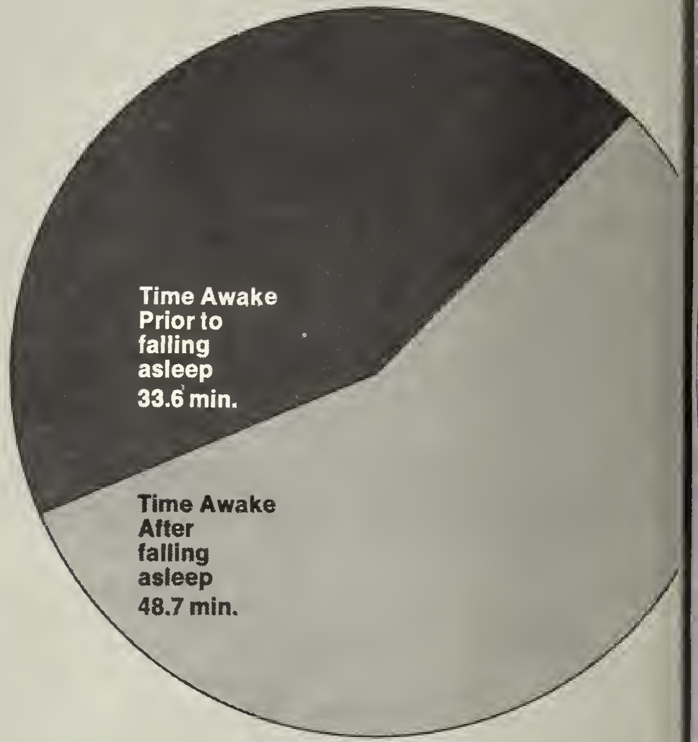
Two sleep laboratory studies recently confirmed findings of earlier studies of this type, namely, that Dalmane 30 mg was effective in patients who had trouble falling asleep, staying asleep or both. One 30-mg capsule of Dalmane usually induced sleep within 22 minutes, decreased the number of awakenings and the wake time after the onset of sleep, and provided 7 to 8 hours of sleep without need to repeat dosage during the night.

These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electroencephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hangover" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

Before
Dalmane
(flurazepam HCl)

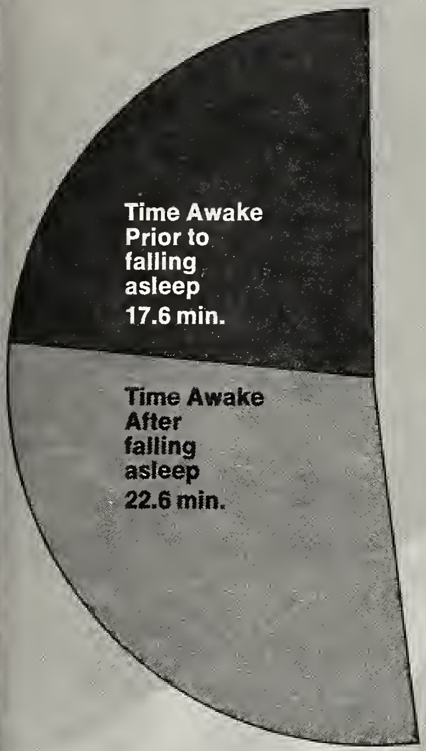


References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

Measurements of sleep in the sleep laboratory are obtained with electroencephalographic, electro-oculographic and electromyographic recordings.

ınd slept through the night

On
Dalmane
(flurazepam HCl)



age sleep laboratory measurements in cited studies

ameter	Before Dalmane	On Dalmane
e required to fall asleep	33.6 min.	17.6 min.
e time after onset of sleep	48.7 min.	22.6 min.
nber of wakeful periods after nset of sleep	12.2	8.4
l sleep time	420.0 min.	447.5 min.
l sleep percent	88.6	94.5

inical effectiveness as
oven in the sleep laboratory

)almane®
lurazepam HCl)

e 30-mg capsule h.s.—usual adult dosage.
e 15-mg capsule h.s.—initial dosage for
lerly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

You know diuretics medically.

Short-acting diuretics may create abrupt
inconvenient waves of diuresis.
Long-acting Hygroton offers a gentle flo
rather than abrupt diuresis.
It's smooth acting.
In edema and hypertension.

Hygroton® chlorthalidone U

Makes water, not waves.

But have you met them socially?

Electrolyte imbalance may occur when using diuretics. Hygroton is contraindicated in severe renal or hepatic diseases and, of course, if it causes hypersensitivity. Carefully supervise those who may be receiving other antihypertensives.

Hygroton® chlorthalidone USP *Indications:* Hypertension and many types of edema involving retention of salt and water. *Contraindications:* Hypersensitivity and most cases of severe renal or hepatic diseases. *Warnings:* With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Use with caution in pregnant women and nursing mothers since the drug crosses the placental barrier and appears in cord blood and since thiazides appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus. *Precautions:* Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria. Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. *Adverse Reactions:* Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization. *Average Dosage:* 50 or 100 mg. with breakfast daily or 100 mg. every other day. *How Supplied:* White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000. (B)46-230-G *For full details, please see the complete prescribing information.*

GEIGY Pharmaceuticals, Division of CIBA-GEIGY Corporation, Ardsley, New York 10502

HY· 7

Michigan Medicine

IN THIS ISSUE

SCIENTIFIC ARTICLES

997 Changing patterns of amphetamine abuse: The role of the physician; Joseph R. Novello, MD
1001 Drug Abuse of the innocents; Marilyn Heins, MD, Leon Epstein, BA
1007 Neonatal heroin (diacetylmorphine) addiction; Paul M. Zavell, MD
1009 The treatment and rehabilitation of heroin addicts; Walter Meester, MD, Chester J. Maternowski, MD, James A. Millard, MD, Edward A. Jones, Jr., MD, Howard B. Huisman, PhD, William H. Kooistra, PhD
1015 The psychodynamics of the 'bad trip'; Gordon R. Forrer, MD

See Pages 1093-1096 for Special Insert on Gonorrhea Detection

SPECIAL ARTICLES

1040 Findings of MSMS survey of the costs of medical practice; John Anthony
1078 The AMA supports efforts to solve health care problems; Donald N. Sweeny, Jr., MD

OTHER FEATURES

994 MSMS leadership
995 President's page
1000 Perinatal tips
1005 Drug therapy problems
1006 The viewbox
1014 Michigan authors
1018 Monthly surveillance report
1030 The mailbag
1033 Your opinion please
1053 MSMS news
Mediscene
1077 County societies
1058 New members
1062 About doctors
1066 Ancillary
1084 In memoriam
1089 Breaking news

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published Semi-Monthly, Trimonthly in January and December; 26 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351. © 1971 Michigan State Medical Society.

Devoted to the interests of the medical profession and public health in Michigan.

INFORMATION FOR CONTRIBUTORS

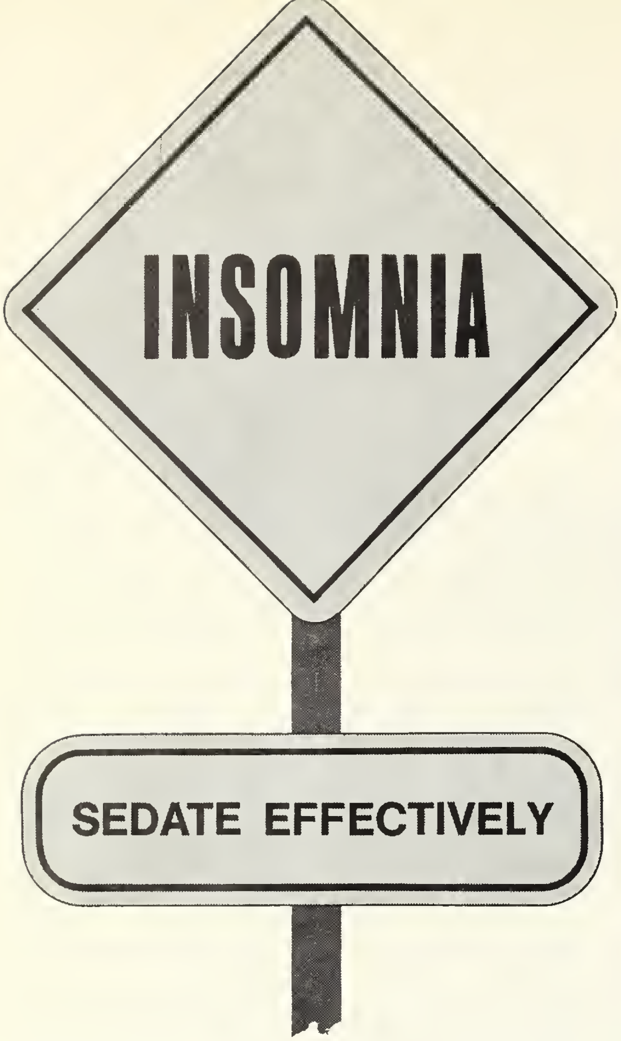
1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size (8½ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.
2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.
3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by Michigan Medicine.
4. Articles should ordinarily be less than four printed pages in length (3000 words).
5. References should conform to *Cumulative Index Medicus,* including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.
6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. New items and notes are welcome.
7. It is understood that material is submitted for exclusive publication in Michigan Medicine.

PUBLICATION COMMITTEE
Edward J. Tallant, MD
Detroit
Chairman

SCIENTIFIC EDITOR
John W. Moses, MD

EXECUTIVE EDITOR
Herbert A. Auer

MANAGING EDITOR
Judith Marr



With QUĪ-A-ZONE — you can sedate effectively. A balanced combination of short, intermediate, and long-acting barbiturates (totaling 100 mg.) in a rapidly disintegrating tablet — sedation is provided within a few minutes . . . followed by sound restful sleep . . . usually without morning hangover. The four barbiturates in QUĪ-A-ZONE have dual channels of elimination (renal and hepatic) to lessen metabolic burden, decrease barbiturate retention, and minimize depression.

QUĪ-A-ZONE™

Each rapidly-disintegrating tablet contains 25 mg. secobarbital, 25 mg. pentobarbital, 25 mg. butabarbital, and 25 mg. phenobarbital. Bottles of 100.
Usual Adult Dose: 1 to 2 tablets before retiring.
PRECAUTION: Should not be administered to patients sensitive to barbiturates, or in cases of known previous addiction. Warning: May be habit forming.

W-C PRECISION PHARMACEUTICALS

SEND FOR SAMPLES.

WALKER, CORP & CO., INC.
Syracuse, New York 13201

"Michigan physicians' earnings have failed to keep up proportionately with increases in costs involved in conducting a medical practice."

Want to know more? See page 1040 for a complete report of the MSMS survey of the costs of medical practice.

IN ASTHMA
IN EMPHYSEMA

optional therapy

*

THE mudranes®

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula

First choice

MUDRANE-2

When ephedrine is too exciting or is contraindicated

MUDRANE GG

During pregnancy or when K.I. is contraindicated or not tolerated

MUDRANE GG-2

A counterpart for Mudrane-2

MUDRANE GG ELIXIR

For pediatric use or where liquids are preferred

Clinical specimens available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217
Manufacturers of Ethical Pharmaceuticals

This was the 1971 MSMS Annual Session

Sidney Adler, MD, Detroit, new MSMS president, delivers his inaugural address.

Doctor Adler is sworn into office by Vernon V. Bass, MD, Saginaw, MSMS speaker of the House.

Harold H. Hiscock, MD, Flint, receives the tribute of the MSMS House as he completes his year as president. In the background are Doctor Adler, left, and James J. Fryfogle, MD, Detroit, vice speaker of the MSMS House of Delegates.

A past speaker's pin is presented to James B. Blodgett, MD, right, by Vernon V. Bass, MD, current speaker. Doctor Blodgett led the House during the years 1968-1970.

An attractive array of scientific exhibits was viewed during the MSMS Scientific Sessions Oct. 6-7 by Michigan physicians and guests.

Among the new members of the MSMS Council, elected at the Annual Session, are, from left, Raymond Hockstad, MD, Escanaba; William A. DeYoung, MD, Saginaw, and Louis R. Zako, MD, Allen Park. Not shown is new councilor James H. Tisdel, MD, Port Huron.

1971-72 Chairmen of MSMS standing committees are, from left, Edward J. Tallant, MD, Detroit, publications; Ernest P. Griffin, Jr., MD, Flint, finance; Robert C. Prophater, MD, Bay City, Legislative Policy, and Ralph R. Cooper, MD, Detroit, Scientific and Educational Affairs.

Special guests during the 1971 meeting of the MSMS House of Delegates are from left, Paul Mitchell, president, junior class, Wayne State University School of Medicine; Stephen Lowry, president, University of Michigan SAMA chapter; Michael Shier, Michigan State University College of Human Medicine, and Bernie Stulberg, treasurer, Sophomore class, University of Michigan School of Medicine.

See additional photos on pages 1064, 1065 and in the breaking news (blue) pages at the back of this issue.

MSMS Leadership

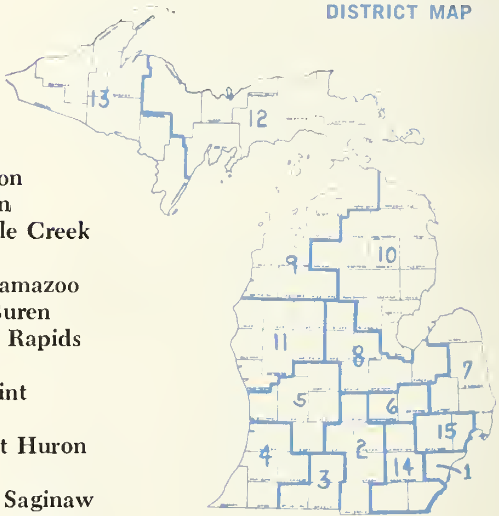
PRESIDENT: Sidney Adler, MD, Detroit
PRESIDENT-ELECT: John J. Coury, MD, Port Huron
SECRETARY: Kenneth H. Johnson, MD, Lansing
ASST. SECRETARY: Ross V. Taylor, MD, Jackson
TREASURER: John R. Ylvisaker, MD, Pontiac
ASST. TREASURER: Ernest P. Griffin, Jr., MD, Flint
SPEAKER: Vernon V. Bass, MD, Saginaw
VICE-SPEAKER: James D. Fryfogle, MD, Detroit
PAST PRESIDENT: Harold H. Hiscock, MD, Flint

COUNCIL CHAIRMAN: Brooker L. Masters, MD, Fremont
VICE CHAIRMAN: Robert M. Leitch, MD, Battle Creek
DIRECTOR: Warren F. Tryloff, East Lansing
GENERAL COUNSEL: Lester P. Dodd, Detroit
LEGAL COUNSEL: A. Stewart Kerr, Detroit
SCIENTIFIC EDITOR: John W. Moses, MD, Detroit
ECON. CONSULTANT: Clyde T. Hardwick, Houghton
HISTORIAN: Wm. J. Stapleton, Jr., MD, Detroit
ASST. HISTORIAN: Wm. M. LeFevre, MD, Muskegon

AMA DELEGATES
- John J. Coury, MD, Port Huron
- George W. Slagle, MD, Battle Creek
- Donald N. Sweeny, Jr., MD, Detroit (Chairman)
- Joseph A. Witter, MD, Rochester
- Otto K. Engelke, MD, Ann Arbor
- Robert E. Rice, MD, Greenville
- John W. Moses, MD, Detroit
- Paul T. Lahti, MD, Royal Oak

ALTERNATES
- James C. Danforth, Jr., MD, Detroit
- Marjorie Peebles Meyers, MD, Detroit
- Robert C. Prophater, MD, Bay City
- Vernon V. Bass, MD, Saginaw
- Frank B. Walker II, MD, Grosse Pointe
- Donald T. Anderson, MD, Kingsford
- Richard McMurray, MD, Flint
- Brooker L. Masters, MD, Fremont

COUNCILOR DISTRICT MAP



First District Councilors: (Wayne County)
- Edward J. Tallant, MD, Detroit
- Ralph R. Cooper, MD, Detroit
- Frank G. Bicknell, MD, Detroit
- Brock E. Brush, MD, Detroit
- Louis R. Zako, MD, Allen Park

Second District Councilor: Ross V. Taylor, MD, Jackson
- Counties: Clinton, Eaton, Hillsdale, Ingham, Jackson

Third District Councilor: Robert M. Leitch, MD, Battle Creek
- Counties: Branch, Calhoun, St. Joseph

Fourth District Councilor: W. Kaye Locklin, MD, Kalamazoo
- Counties: Allegan, Berrien, Cass, Kalamazoo, Van Buren

Fifth District Councilor: Noyes L. Avery, MD, Grand Rapids
- Counties: Barry, Ionia-Montcalm, Kent, Ottawa

Sixth District Councilor: Ernest P. Griffin, Jr., MD, Flint
- Counties: Genesee, Shiawassee

Seventh District Councilor: James H. Tisdel, MD, Port Huron
- Counties: Huron, Sanilac, Lapeer, St. Clair

Eighth District Councilor: William A. DeYoung, MD, Saginaw
- Counties: Gratiot-Isabella-Clare, Midland, Saginaw, Tuscola

Ninth District Councilor: Adam C. McClay, MD, Traverse City
- Counties: Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet combined), Wexford-Missaukee

Tenth District Councilor: Robert C. Prophater, MD, Bay City
- Counties: Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties, (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined)

Eleventh District Councilor: Brooker L. Masters, MD, Fremont
- Counties: Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana

Twelfth District Councilor: Raymond Hockstad, MD, Escanaba
- Counties: Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger

Thirteenth District Councilor: Donald T. Anderson, MD, Wakefield
- Counties: Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon

Fourteenth District Councilor: Donato F. Sarapo, MD, Adrian
- Counties: Lenawee, Livingston, Monroe, Washtenaw

Fifteenth District Councilor: Sydney Scher, MD, Mount Clemens
- Counties: Macomb, Oakland

President's Page

Sidney Adler, MD
MSMS President

A time for doubting

Incoming Michigan State Medical Society President Sidney Adler, MD, Detroit, raised many questions for consideration by Michigan doctors when he gave his inaugural address Oct. 3 in Grand Rapids. The text of his speech follows:

If it hasn't already been said by all Delegates present, it probably will be by most of them:

"These are trying times for the medical profession."

It can be said with equal force that these are trying times for everyone in every walk of life.

Let me warn those of you who look to me for answers that you probably will be disappointed. One of the most trying problems of the times is the assumption on the part of so many people in government, schools, the professions and the public that each knows how to answer all questions—how to unscrew the inscrutable—how to confound the experts. They look with ill-disguised contempt upon men like me who, without embarrassment, say "I don't know" and answer a question with a question.

Well, I don't know the answers to the problems that beset the medical profession, and I have even less confidence in those who try to convince me of their expertise and to feed me easy answers.

The fact that they can't agree among themselves is pretty good evidence that their crystal ball isn't working any better than mine.

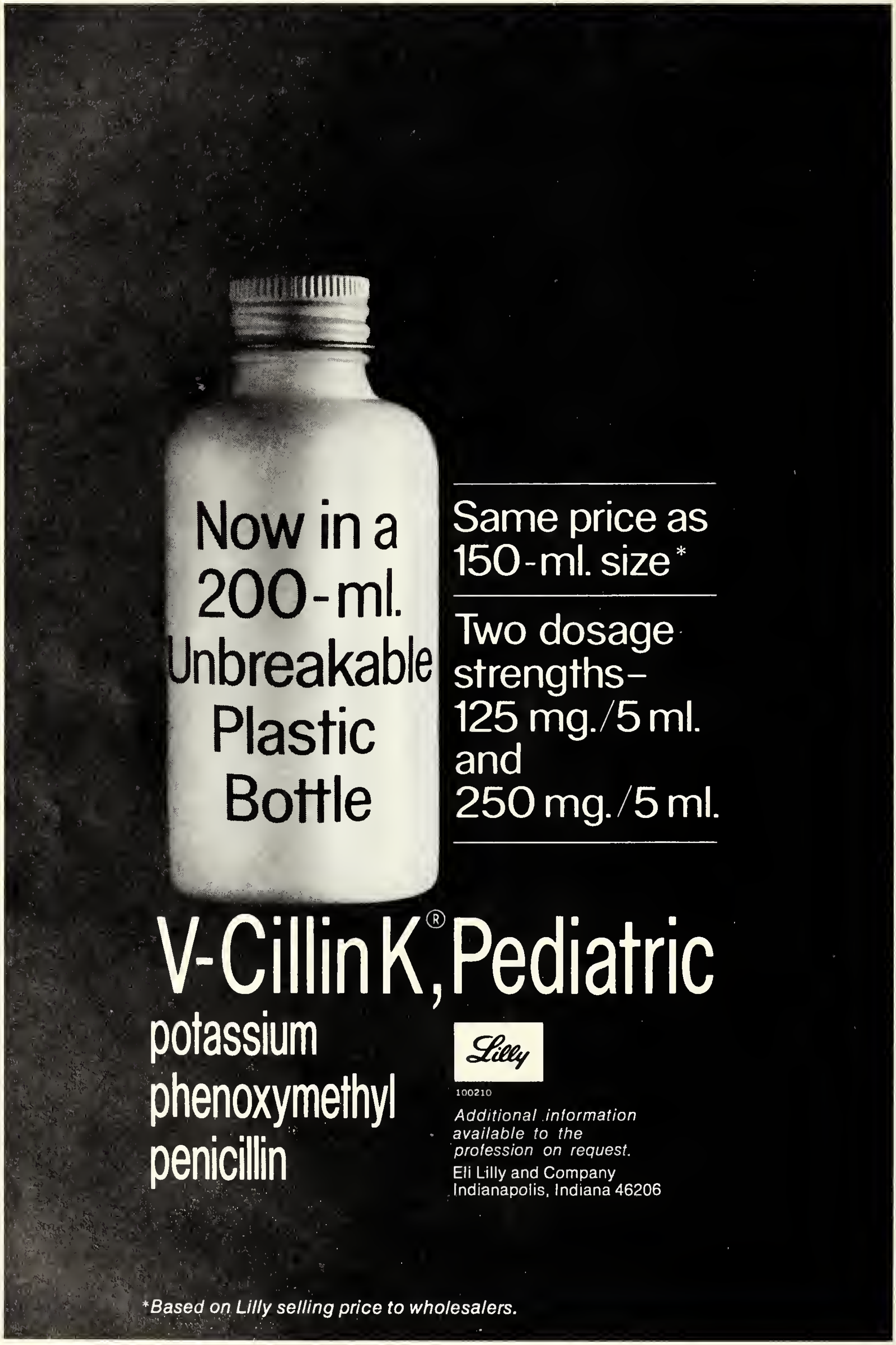
I do have some questions of my own to put to you tonight, and if in the asking I give the impression that I think I know part of the answer, it's because I possibly do. The questions are these:

For instance,

Health Maintenance Organizations: This has become a national catchphrase, but what does it mean?

I can point out that we are now seeing university medical centers, teaching hospitals, large hospitals and community medical centers competing for the medical dollar. There is ample evidence that this *type* of *care* is far more expensive than office calls in private offices. Who measures quality and on what basis?

(Continued on Page 1025)



Now in a
200-ml.
Unbreakable
Plastic
Bottle

Same price as
150-ml. size*

Two dosage
strengths–
125 mg./5 ml.
and
250 mg./5 ml.

V-Cillin K®, Pediatric

potassium
phenoxymethyl
penicillin

Lilly

100210

*Additional information
available to the
profession on request.*

Eli Lilly and Company
Indianapolis, Indiana 46206

**Based on Lilly selling price to wholesalers.*

CHANGING PATTERNS OF AMPHETAMINE ABUSE:

THE ROLE OF THE PHYSICIAN

By Joseph R. Novello, MD
Ann Arbor

Amphetamine, although of limited clinical use, continues to be widely prescribed. In one midwest urban community amphetamine accounted for approximately 5% of all prescriptions filled in 1970.

At the same time, the spread of the drug subculture through all layers of contemporary American life has created a readily available illegal source of amphetamine in most communities.

The physician, therefore, must be more careful than ever in prescribing amphetamine products; even if he is alert to developing amphetamine dependence in a patient, it may be too late. Denied amphetamine through traditional medical channels, the patient can now get it on the streets.

The easy road from casual amphetamine use in medical practice to frank iatrogenic drug dependance and on to uncontrolled, illegal amphetamine abuse, is documented by a case report from the author's recent experience.

Until recently, amphetamine abusers could be clearly divided into two groups: 1. The Illegal Abusers, generally "street people" or citizens of the drug sub-culture, who obtain their drug from illegal sources; in some cases the drug is manufactured illegally in black market operations but, more often, it is a legally manufactured product of a legitimate pharmaceutical house that has been diverted into the black market by various routes. 2. The Iatrogenic Abusers, establishment types, who initially obtain their amphetamine on prescription from their personal physician and then maintain their habit either through continued refill orders from the same physician, who often is unaware of the patient's growing drug dependence, or by the more elaborate trickery of obtaining small amounts of amphetamine simultaneously from a series of unsuspecting physicians.

With the metastasis, however, of the drug problem from the big city ghettos and college campuses into suburbia and even rural areas, iatrogenic amphetamine abusers, whose level of abuse was once sharply limited to a relatively limited source of drugs, find it increasingly easy to obtain their drug through contacts with the growing number of illegal abusers and move "up" to illegal abuse after first being introduced to amphetamine in the traditional medical setting. Consequently, now, more than ever before, the physician must prescribe amphetamine products with extreme diligence and care, keeping in mind that the drug is potentially dependence-producing and once "hooked," the patient can easily tap illegal sources of drug supply and is, then, lost to medical followup and possible saving intervention.

CASE HISTORY

The following case history, taken from the author's recent experience, documents the easy road from casual amphetamine use in medical practice to frank iatrogenic drug dependence and on to uncontrolled, illegal drug abuse.

A 36-year-old housewife, from a comfortable upper middle-class suburb, visited her personal physician because she wanted to "lose about 10 pounds" which she had gained following the birth of her third child. The physician prescribed a 1000 calorie diet and amphetamine spansules. She visited him weekly for over three months but failed to lose weight. When, finally, the physician suggested that it was useless to continue, she reluctantly agreed. On the way out of the office she asked, off-handedly, if she could "keep taking the pills," anyway. The physician's angry answer was "No!" and he launched into a highly intellectualized sermon on the dangers of amphetamine abuse. Shaken, the patient returned home and tried for a few days to cope with her feelings of depression and inadequacy without the "uppers," as she referred to her amphetamine spansules. But she could not tolerate the "down" and, succumbing to the powerful need for the drug, went to a physician in a nearby community who was known as a "diet specialist" and, using an assumed name, ob-

---

Joseph R. Novello, MD is a Resident in Psychiatry, Neuropsychiatric Institute, University of Michigan Medical Center.

Scientific Papers

tained her "uppers" and another 1000 calorie diet. This arrangement continued for about two months until the second physician began getting suspicious about the patient's frequent request for "refills" because she had "lost the pills" or "mislaid the prescription." Sensing that the physician was about to confront her and perhaps also force her to expose her true identy, the patient abruptly stopped visiting him. Now she was frantic. Just as she was about to look for another physician and use a new alias she happened to talk to a girl friend, who was attending graduate school at a nearby university. The girl friend told her of the college parties she had attended where marijuana and drugs flowed freely. The patient expressed an interest in "just seeing what those parties are really like" and was invited to a Saturday night bash. It did not take long for her to get hold of a supply of "black beauties" (speed freakese for a commercially-produced amphetamine) and she quickly had an obliging contact who agreed to supply her whenever she "needed help." The author met her several months later when she was admitted to a local hospital with a florid amphetamine psychosis.

Amphetamine Dependence

Guidelines issued by WHO in 1964, for the recognition of amphetamine dependence are useful in conceptualizing the case reported above and apply equally to other cases as well:

1. A desire or need to continue taking the drug.
2. A consumption of increasing amounts to obtain greater excitatory and euphoric effects or to combat more effectively depression and fatigue; accompanied in some measure by development of tolerance.
3. Psychic dependence on the effects of the drug.

Although it was initially believed that no characteristic abstinence syndrome was seen with chronic abuse of amphetamine, Kramer, Fischman, and Littlefield[1] have recently suggested that the period of profound sleep and lethargy (the "crash") that follows amphetamine withdrawal represents a true withdrawal syndrome.

Medical Uses of Amphetamine

Although, historically, amphetamine has been used in a wide range of clinical conditions, today the indications for using the drug are few. A brief overview of the current use of amphetamine in medical practice is instructive:

Dieting: Probably the greatest misuse of the drug. Although amphetamines do suppress appetite they are not necessary to the treatment of obesity. Prescribing of such a potentially addicting drug for anything but gross, life-endangering obesity is questionable and, even in such cases, is rarely, if ever, necessary. Recently a group of Utah physicians signed a resolution that under no circumstances would they prescribe amphetamines for obesity because they found the drug has shown no lasting benefit in the treatment of the condition. Furthermore, they cited 122 drugstore and physician office burglaries in Salt Lake City in 1970 with amphetamine being the major target.[2]

Depression: Amphetamine has been replaced by tri-cyclics and, to a lesser extent, by mono-amine oxidase inhibitors. Amphetamine is not generally regarded as desirable in the treatment of either endogenous depression or situational, reactive depression. The well-known "Housewife's Syndrome" probably accounts for a large number of secret amphetamine abusers. It is better treated with environmental manipulation and/or psychotherapy.

Hyperkinetic Children: Probably the closest that amphetamine comes to being a "drug of choice," although still somewhat controversial. Methylphenidate, however, is also available. Results are unpredictable. Careful diagnosis and continued medical supervision is necessary to avoid misuse and undesirable side effects.[3]

Enuresis: Results unpredictable. Other treatment, including psychiatric is available.

A number of other conditions have been treated with amphetamine. They are primarily of historic and experimental interest or involve amphetamine as adjuncts to primary therapy. None constitutes a current indicated use for the drug: narcolepsy, Parkinsonism, grand mal epilepsy, alcoholism, barbiturate poisoning, sociopathic personality, abreactive treatment in psychiatry,[4] motion sickness,[5] dysmenorrhea,[6] orthostatic hypotension.[7]

THE PROBLEM

In spite of this limited usefulness of amphetamine, an FDA survey in 1962 revealed that 50 tons of amphetamine products were produced legally in the United States; or 250 mgm. for every man, woman, and child in the country. Recently the author interviewed a number of pharmacists in a middle-sized Midwestern urban community. Their estimates of the number of prescriptions filled in their pharmacies for amphetamine products averaged about 5% of the total number of prescriptions filled in 1970. One druggist, whose pharmacy was located near a university, estimated that 10-15% of the prescriptions he filled last year were for amphetamine!

Although it is not possible to know how many of these amphetamine-takers will go on to true amphetamine abuse, it is reasonable to estimate that a significant number of amphetamine abusers initially obtain their drug from a physician. Connell[8] reported in 1966 that 28% of amphetamine dependent drug abusers in his series were initially given the drug therapeutically by qualified members of the medical profession.

Therefore, given the current reality of our "turned-on" society and the easy availability of "speed" in the community, the physician must be be increasingly selective in the use of amphetamine in his clinical practice. Although he should be free to prescribe the drug when it is indicated, the physician must be aware that it is a potentially dangerous course of therapy and, even if he recognizes budding drug-dependence in a patient, it may be too late. What the patient can no longer get on the physician's prescription at the corner drugstore, he (or she) can easily get on the street from a "friend."

Generic and Trade Names of Drugs

1. Methylphenidate — Ritalin

REFERENCES

1. Kramer, J.C., Fischman, V.S., and Littlefield, D.C., Amphetamine Abuse, Patterns and Effects of High Doses Taken Intravenously, JAMA 201:305-309, (July 31) 1967.
2. American Medical News (Dec. 14) 1970.
3. Why Amphetamines Help Only Some Kids, Medical World News (May 9) 1969.
4. Connell, P.H., The Use and Abuse of Amphetamines, Practitioner 200:234-243 (Feb.) 1968.
5. Wood, C.D., Graybiel, A., Evaluation of Antimotion Sickness Drugs: A New Effective Remedy Revealed, Aerospace Med. 41:932-933 (Aug.) 1970.
6. Ogden, J.A., Wade, M.E., Anderson, G., Davis, C.D., Treatment of Dysmenorrhea, Am. J. Ob. Gyn. 106: 838-842 (March 15) 1970.
7. Seller, R.H., Idiopathic Orthostatic Hypotension, Report of Successful Treatment with a New Form of Therapy, Am. J. Cardiol. 23:838-844 (June) 1969.
8. Connell, P.H., Clinical Manifestations and Treatment of Amphetamine Type of Dependence, JAMA 196:130-135 (May 23) 1966.

Perinatal Tips

By Paul M. Zavell, MD
Detroit

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Maternal

This 36-year-old, A positive, G IV, P III, white mother had an uneventful pregnancy until her 34th week at which time there was spontaneous rupture of membranes. After the initial rush of fluid she had only occasional dripping of amniotic fluid but no labor pains for 36 hours. With the onset of mild labor pains she called her physician who admitted her to the hospital. Upon admission she was found to be in mild labor (one to two centimeters dilatation and –1 station). Thirteen hours later (or 49 hours after rupture of her membranes) she delivered vaginally a 5 lb. 14 oz. male infant.

Fetal

The infant had onset of spontaneous respirations as well as good cry right after birth. Initial physical exam was normal with only minimal cyanosis of hands and feet noted. Sixteen hours later the infant began to have grunty respirations relieved when he was placed in an incubator with oxygen. Temperature then was 96.2° (R) and despite heat rose only to 97.6° (R). Three hours later regurgitation of a feeding occurred and this was followed by the onset of substernal retractions. The infant began to become cyanotic in oxygen despite increasing amounts. A portable chest X-ray was taken that was read as normal. Over the next three hours respirations became progressively more labored and the infant expired. At autopsy bilateral lobar pneumonia due to Streptococcus Viridans was found.

Perinatal Committee Comments

1. Prolonged rupture of membranes should alert all involved that the newborn infant has an increased chance of acquiring infection (sepsis, pneumonia, etc.) in utero with manifestation of symptoms in the first 24 to 72 hours after birth.

2. Early use of antibiotics here might have saved this infant.

3. A "normal" chest X-ray does not always rule out infection in the chest. X-ray findings can (and do) lag behind clinical findings frequently. There is no substitute for good clinic evaluation of the patient.

4. Persistent hypothermia in a newborn should alert one to possible infection or CNS problem.

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P.; and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

DRUG ABUSE OF THE INNOCENTS

By Marilyn Heins, MD
Leon Epstein, BA

Poisoning of children due to the accidental ingestion of Methadone is currently a problem in Detroit. It is a well known pediatric fact that children will ingest anything. When a new type of poisoning incident occurs that had not been seen before, usually this reflects a new or newly accessible product.

Methadone is not a new drug; it has been in clinical use since the end of World War II. Goodman & Gilman's textbook describes Methadone as follows:

> "The pharmacological actions of Methadone are qualitatively identical to those of morphine. The outstanding properties of Methadone are its effective analgesic activity, its efficacy by the oral route, and its extended duration of action in physically dependent individuals. The drug also causes sedation and respiratory depression, and exhibits effects upon smooth muscle and the cardiovascular system similar to those of morphine."[1]

In an attempt to explore factors leading to the recent, almost epidemic, increase in Methadone ingestion, we studied the cases admitted to the pediatric wards of Detroit General Hospital between January, 1970 and April, 1971 by means of chart review and home interviews to ascertain the environmental factors contributing to the incidents. We also studied the accessibility of Methadone in this area by means of interviews held with individuals involved in the dispensing of Methadone and those regulating the dispensing, namely the Detroit Police Department, Inspectional Services Bureau, Organized Crime Division, Narcotics Section; and the Department of Justice, Bureau of Narcotics & Dangerous Drugs.

CASE REPORTS

E.B., a 25 month old black female, was brought to the hospital 45 minutes after the ingestion of an unknown number of 5 mg. Methadone pills. She was comatose on admission and died in the Emergency Room 3½ hours later, after suffering a cardiac arrest. The family could not be located for interview. We have no information on how Methadone was available to the child.

F.C., a 17 month old black male, was active and well when his mother left him playing alone in their neighbor's living room. One and ½ hours later, the mother noticed the patient was very drowsy. He developed profuse sweating, irritability, restlessness, and generalized stiffness of the body, with circumoral cyanosis. The neighbor reported that she could not find her Methadone pill which had been placed on a small table in the living room. At this point, the child was brought to the hospital. We could not learn how the neighbor obtained the Methadone.

S.B., a four year old black girl, was staying with her aunt. The child complained of a headache and the aunt's husband, unable to find children's aspirin, gave the child what he thought was an Excedrin. It turned out to be Methadone in an Excedrin bottle. The aunt, who gave us the information, stated that her husband, her brother and sister were all heroin addicts at one time and had all tried the use of Methdaone to help cure their addiction. Some Methadone was obtained through a private physician and some from street sources. The Methadone in the Excedrin bottle had been obtained from street sources.

L.B., a three year old black girl, ingested some Methadone pills belonging to her uncle. The mother stated that on the day of the incident she and the child were visiting the child's grandmother. The mother said that her brother, who lives in the same household as the grandmother, had been involved in a Methadone program in the past, but was not any longer. He had left some Methadone pills on his dresser; these were found and ingested by the patient, who was described by her mother as a very active child.

Dr. Heins is Director of Pediatrics at Detroit General Hospital and Associate Professor of Pediatrics at the Wayne State University School of Medicine
Mr. Epstein is a third year student at the Wayne State University School of Medicine

> ***". . . Methadone is much more available at present than it was a year ago, and . . . it is available from the same sources selling heroin, amphetamines and barbiturates."***

The mother was in the next room when the child ingested the Methadone. Some time later, the child was discovered to be drowsy and was brought to the hospital.

H.B., a 19 month old black male, was found by his mother in bed at a very unusual time; too early for him to go asleep. She could hardly arouse the child from his sleep. When her husband later claimed he could not find his Methadone pills, they suspected the child might have taken one, and brought him to the hospital.

L.H., a 23 month old black girl, was brought to the Emergency Room by her mother because the child took a tablet of Methadone belonging to the mother's brother-in-law. He had accidentally left a tablet there while visiting the child's mother.

L.Be., a 1½ year old black girl, ingested two Methadone pills (10 mg.) while her mother was out shopping. The child was in the care of a babysitter. According to the babysitter, three white pills were brought into the house by some young (under 10) boys, who were friends of the patient's older brother. The pills were left in the house. When the mother returned, she noticed the one remaining pill and questioned the babysitter. Together they realized that two pills were missing. Three or four hours later, when the child became drowsy and limp, it was realized she had ingested them. It should be emphasized that the mother did not seem to know what the pills were and there was no evidence of drug abuse in the home. At the time of the interview, she accurately described the pill. We were unsuccessful in our attempts to track down the young boys to ascertain where they had obtained the pills.

L. Ho., an 18 month old black female, was brought in by her parents with the chief complaint of possibly swallowing Methadone (2 tablets 10 mg.). On the day of the incident, the patient's father (not married to her mother), purchased a prescription of Methadone for a friend who had no money. The pills (about 14) were in a bag lying on a table. The patient, who is an active child, took two of the pills. Her mother and father discovered that the two pills were missing but they did nothing for several hours. The mother stated that the father told her that the pills were for an "upset stomach and wouldn't hurt the child." Later he admitted it was Methadone and the child was taken to the hospital.

D.S., a two year old black male, was in good health until the day of the incident when he ingested two 10 mg. Methadone pills, which he found in the purse of his babysitter. His mother stated that while she was out being interviewed for a job, the patient was in the care of a babysitter. When the mother returned home, she noticed that the patient was not acting right, so

Table I

Name	Age	Sex	No. and Size of Pills	Time Between Ingestion and Arrival at Hospital	Stay in Hospital	Outcome
E.B.	2 years	F	?1 (5 mg.)	45 minutes	3½ hours	died
F.C.	17 mos.	M	1 (? mg.)	2 hours	5 days	recovered
S.B.	4 years	F	½ (10 mg.)	3½ hours	2 days	recovered
L.B.	3 years	F	½ (10 mg.)	several hours	1 day	recovered
H.B.	19 months	M	2 (10 mg.)	several hours	18 days	recovered
L.H.	23 months	F	1 (? mg.)	1-2 hours	4 days	recovered
L.Be.	2½ years	F	2 (10 mg.)	3¾ hours	8 days	recovered
L.Ho.	18 months	F	2 (10 mg.)	5 or 6 hours	29 days	brain damage
D.S.	2 years	M	2 (10 mg.)	1½ hours	6 days	recovered

she questioned the babysitter. The babysitter first denied, but finally told the mother, that the patient had taken two pills from her purse before she could stop him. The babysitter told the mother that the pills were Methadone that a friend had given her to sell.

DISCUSSION

Nine cases of accidental Methadone ingestion by children were admitted to Detroit General Hospital from January 1970 to April 1971. (See Table I). There were six girls, three boys; all of the children were black and from low income families consistent with the population served by Detroit General Hospital. The ages ranged from 17 months to four years. The children were nearly always described as active and curious.

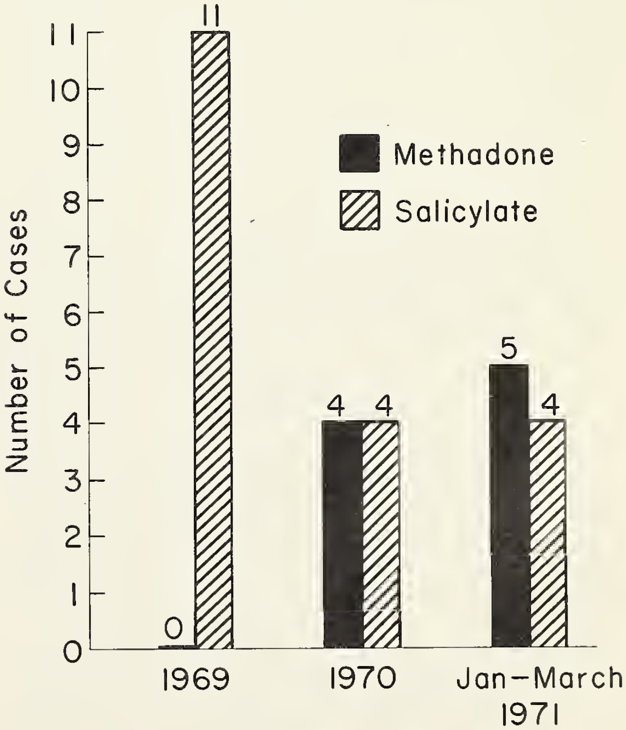
No cases of Methadone ingestion were found prior to 1970. Four cases occurred in 1970; five cases occurred in the first four months of 1971. Two other inner city hospitals which serve children have also had recent cases of Methadone ingestion. Children's Hospital of Michigan had approximately 20 cases over roughly the same period as our study and Henry Ford Hospital had at least three cases. All the cases have been due to pill ingestion. Phone calls to several suburban hospitals revealed no cases of accidental Methadone ingestion, confirming our impression that this is an inner city problem.

When we started the study, we thought there would be a connection between the recent opening of Methadone maintenance clinics in Detroit and the outbreak of accidental ingestion; but virtually all of the Methadone at local clinics is dispensed in liquid form by confrontation in limited amounts. None of our cases were due to liquid ingestion.

What factors, then, have contributed to the easy accessibility of Methadone pills? In the course of interviewing the families of the children who had ingested Methadone, one individual readily admitted that she had easily obtained the Methadone pills from a black market source, and that it would have been difficult to do so a year ago. The source of the Methadone in other cases was as follows: In one case the pills were obtained from a local clinic that does dispense Methadone in pill form; in another case the source was a prescription from a private physician; in two cases the pills were brought into the home by somebody outside of the household (no addict in the household); and in the remaining cases interviewed, there was a person in the household taking the Methadone but the source was not ascertained. In all of the cases interviewed, the pills were accurately described as being of pharmaceutical origin.

In order to obtain some perspective, we compared our study cases with the accidental ingestion of another pill usually accessible to children. The graph shows this comparison of cases of Methadone and salicylate ingestions in the pediatric age group admitted to Detroit General Hospital during the same time periods. It is clear from an examination of the graph that the incidence of Methadone ingestion is increasing. (Note that the last time period on the graph includes only the first three months of this year and already there have been more cases than in 1970). One might postulate that the incidence of accidental ingestion of a drug would parallel its availability, and therefore expect salicylate ingestion to far outnumber Methadone poisonings. This does not seem to be the case. A possible explanation is that Methadone is much more readily available than is generally thought.

Our investigation seemed to substantiate that Methadone is at present easily obtained, both through clinics, and on the illicit market. Although no hard data could be obtained on the availability of Methadone pills on the streets (illicit supplies), we did make an attempt to get an idea of the extent of the problem. A spokesman for the Detroit Police Department, Inspectional Services Bureau, Organized Crime Division, Narcotics Section, stated that his impression (from drugs confiscated during raids, and from informants) was that Methadone is much more available at present that it was a year ago, and that it is available from the same sources selling heroin, amphetamines, and barbiturates.



> ***"Once any Methadone reaches the black market, there seems to be no way to protect young children from accidental ingestion."***

Next we interviewed an ex-heroin addict presently employed by the City of Detroit's Methadone program. He told us that he had investigated street sources on his own and found that Methadone was so readily available that the price has dropped from $1.00 per pill a year ago to $.50 per pill now and, at times selling for 3/$1.00 due to competitive pricing. Our street sources told us that addicts dissolve Methadone pills for intravenous use and often prefer it to heroin because it is cheaper, safer, and causes a good "high."

One can only speculate about such factors as the less rigid supervision of children in low income households or the irresponsible nature of the addict personality. However, examination of our cases reveals that the circumstances of supervision varied and that in some households there was no addict. Once again the conclusion we draw is randomness of acquisition related to easy accessibility. If one considers the fact that heroin has been available in the same community (in fact in some of the same households studied) for a longer time than Methadone, one might ask why has there been no increase in heroin ingestion in children. We have had only one pediatric admission to Detroit General Hospital for heroin ingestion since January 1969. We believe the answer to this question is (1) that Methadone is in pill form (2) it is significantly less expensive than heroin (3) Methadone is quasi-legal. Heroin addicts generally do not leave their heroin lying around, but apparently they do leave their Methadone lying around. In addition, most addicts rarely obtain heroin in more than a one or two day supply. Methadone is available and inexpensive enough to be obtained from legitimate and illicit sources in quantities to last a week or more. Street sources reveal that it is quite simple to obtain several prescriptions each for a several day supply. Although it could not be explicitly proved, we think a strong case can be made for the hypothesis that Methadone is more likely to be left lying around than heroin and therefore would be more available for accidental ingestion by children.

Since the original source of all the Methadone pills ingested by children in our study was an ethical pharmaceutical company, the responsibility for control of the distribution falls on the medical community.

We found no evidence that Methadone in liquid form was being resold and distributed on the black market (it would be more cumbersome to distribute; it is virtually impossible to quantify dosages; it is non-injectable if mixed with Tang or orange juice; it requires refrigeration; and at present it rarely leaves the clinics in more than two day supplies). There have been reports of ingestion of Methadone in liquid form by children in New York City and Boston.[2,3] As the size of Methadone programs increase making individual supervision more difficult, large numbers of addicts will be taking Methadone home in up to five day supplies. The incidence of poisonings with the liquid form seems to be lower, but the liquid may be potentially more dangerous to a child as the average liquid dose prescribed for Methadone maintenance is 80-120 mg. Ingestion of this amount of Methadone by a child age two to six could lead to death from respiratory failure in ½-3 hours if untreated.[2]

"Diskets" manufactured by Eli Lilly and Company are 40 mg. Methadone tablets specifically marketed for Methadone maintenance programs. Although "Diskets" cannot be dissolved for injection, and are large and bitter, they have already been reported as the cause of Methadone poisoning in a toddler.[4] One hopeful sign on the horizon is the use of l-Methenyl Acetate, which may be given as infrequently as three times/week, thus reducing the amount of medication dispensed by a clinic for use at home.[5]

We hope that all Methadone maintenance programs will implement safety features such as childproof, sealed bottles. We suggest discussing accidental poisoning in group and individual counseling of addicts and making home visits to addicts with young children to ensure safe storage. Once any Methadone reaches the black market, there seems to be no way to protect young children from accidental ingestion.

CONCLUSIONS

A by-product of physician and community interest in halting drug abuse has been the use of Methadone maintenance. In pill form, without adequate supervision, this product easily finds its way into the street. The population at risk, the small children in inner city households, perhaps inadequately supervised, will continue to be a problem. We recommend that Methadone in pill form should not be used in maintenance and indeed should be taken off the market unless strict controls can be used which have apparently failed in Detroit.

(Continued on page 1006)

DRUG THERAPY PROBLEMS

By Persis Mehta, PhD
Ann Arbor

Q. Is prednisone available in parenteral dosage form? (J. D., Detroit).

A. *Prednisone is not soluble and is therefore not available as an injection. The most comparable steroid, prednisolone, is available for intravenous, intramuscular or intrasynovial use.*

Q. Can lidocaine be used as a local anesthetic in a patient with Surfacaine hypersensitivity? (W. F., Ann Arbor).

A. *Lidocaine is dissimilar enough in structure to procaine and related anesthetics that it can be used in individuals sensitive to procaine. An intradermal test can be performed although its reliability has been questioned.*

Q. What percentage of Mercury is excreted when mercurial diuretics are administered? (F. A., Ann Arbor).

A. *The kidneys excrete an amount variously estimated at 60-100% of the mercury in an organomercurial compound within 24 hours, much of the remainder being retained for 2 or 3 days.*

Doctor Mehta is associate project coordinator of the Michigan Regional Drug Information Center, University Hospital, Ann Arbor.

THE INNOCENTS/Continued

SYNOPSIS ABSTRACT

A study of nine cases (one fatal) of accidental Methadone ingestion among inner city toddlers over a 16 month period, revealed that all of the children ingested Methadone pills found in their homes probably due to the easy accessibility of Methadone in pill form in the Detroit area.

ACKNOWLEDGEMENTS

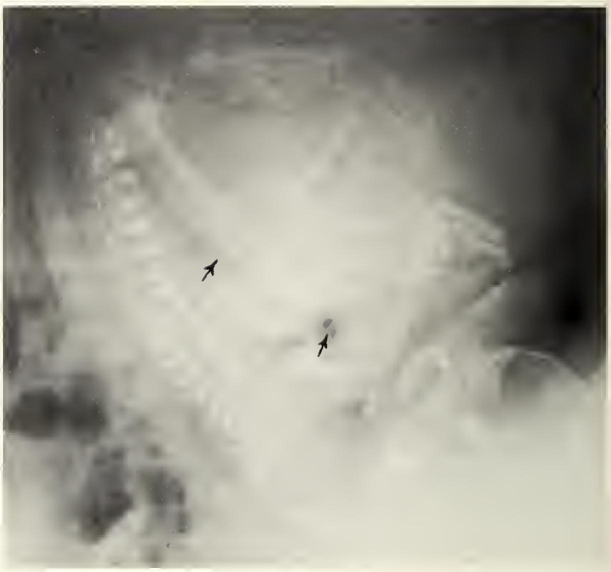
The authors wish to thank the following for their help in compiling the data used in this paper: Dr. Robert High of Henry Ford Hospital and Dr. Regine Aronow of Children's Hospital of Michigan; George Sweda, MD, Deputy Health Commissioner, City of Detroit; Sgt. Peter Kekic of the Detroit Police Department, Inspectional Services Bureau, Organized Crime Division, Narcotics Section; Mr. Pete Drake of the Herman Kiefer Drug Abuse Clinic and the street sources who remain anonymous.

REFERENCES

1. Jaffe J. H.: In the *Pharmacological Basis of Therapeutics.* Goodman L. S., Gilman A., eds. Macmillan, New York *1970* p 260.
2. Dole, V.P., et al: *N.Y. State J Med, 71:* 541-543, 1971.
3. Crawley, W.R., Heddon, J.E.: Letter to the editor. *NEJM 282*: 792, 1971.
4. Inselmar L.: Letter to the editor. *NEJM 284*: 1271, 1971.
5. Jaffe, J. H., Senoy, E. C.: *JAMA 216*: 1303-1305, 1971.

Doctors, expand your knowldege about radiology by studying this monthly column prepared by the chief radiologist at Detroit Memorial Hospital.

The Viewbox



By Raymond S. Kurtzman, MD

Diagnosis

Gas in the fetal circulation (a sign of fetal death).

X-Ray Findings

There is gas visible in the heart as well as in the aorta and other vessels of the fetus on the roentgenological examination of the maternal abdomen.

Discussion

Recognition of intravascular gas in the fetus is a late roentgen sign of fetal death. Its demonstration requires films of good quality with proper positioning, in this case an oblique projection of the maternal abdomen.

The gas is generally not the result of infection. More likely it is caused by a breakdown in the chemical and physical structures of hemoglobin and of other blood elements, causing gases which are normally in solution to separate. This process takes at least one to two weeks to occur and is an absolute sign of fetal death.

At delivery, these fetuses are invariably severely macerated, but the intravascular gas in the fetus produces no specific effects upon the mother other than the fact of the stillbirth itself.

Doctor Kurtzman is an associate scientific editor of **Michigan Medicine.**

NEONATAL HEROIN (DIACETYLMORPHINE) ADDICTION

By Paul M. Zavell, MD*

The Neonatal and Hospital Care Committee of the Michigan Branch of the American Academy of Pediatrics, and the Perinatal Mortality Study Committee of the Wayne County Medical Society, attempting to help pediatricians, general practitioners, and obstetricians in meeting unusual conditions in newborns are publishing the following outline in *Michigan Medicine.* We wish to emphasize that this is only an outline, but we feel a very useful one for the problem of neonatal heroin addiction. As pointed out in the outline, the number of young female addicts in New York City in 1969 was approximately 25,000. The recent increase in incidence of serum hepatitis noted in various parts of the country, but particularly here in Michigan at Herman Kiefer Hospital, points out that Detroit and Michigan are not free of the addiction problem. Experiences at Hutzel Hospital in Detroit have shown an increase in number of neonatal heroin addicts in the past several years.

We hope that this outline is of value to all concerned and we wish to thank the New York Chapter II, District II of the American Academy of Pediatrics (in particular Dr. David Annunziato, Chairman of the Committee on Fetus and Newborn) for permission to use this information.

The Problem:

1. Increased incidence of heroin addiction in younger age group. (25,000 young female addicts in N.Y.C. in '69.)
2. Increased number of teenage pregnancies.
3. Because of its low molecular weight (less than 400) heroin (also Morphine) crosses the placental barrier within 1 hour of being taken by mother by any route.
4. Maternal ignorance of these facts.
5. 90% of all Neonatal Narcotic Withdrawal Syndrome cases are from Heroin.
6. Methadone also produces withdrawal symptoms.
7. Evidence suggests that drugs (Methadone) should not be stopped abruptly during pregnancy.

Symptoms in Baby:

Irritability, excessive crying, high pitched, shrill cry, tremor, convulsion, sneezing, fever, perspiration, sucking and chewing at hands, poor feeding, vomiting, diarrhea, yawning, dyspnea, or cyanosis and skin abrasions from rubbing on sheets.

Morbidity:

1. Not involved with dermatoglyphics.
2. Not involved with chromosome breaks.
3. Associated with increased number of congenital anomalies.
4. Associated with increased obstetrical complications (breech, toxemia, meconium. prem. labor, etc.).
5. Associated with increase in low birth weight or small-for-date babies (intra-uterine growth retardation).
6. Concentration in breast milk minimal (no problem).

Maternal clues:

1. Mother in a hurry to "sign out" of hospital.
2. High incidence of no or poor prenatal care.
3. Often positive serological test for syphilis.
4. High rate low-birth-rate babies (small for dates).
5. Careful physical exam mother (needle marks, skin infection).
6. Careful history mother (usually will be direct).
7. History of Hepatitis.
8. Unusual resistance to normal amounts of analgesics.
9. History of menstrual abnormalities.

---

*Chairman, Neonatal and Hospital Care Committee of the Michigan Branch of the American Academy of Pediatrics and Chairman, Perinatal Mortality Study Committee of the Wayne County Medical Society.

Onset of Symptoms:

1. About 55%-90% of these babies show signs of withdrawal.
2. Onset of symptoms usually within 20-24 hours (80%) —but many occur as late as 5-7 days.
3. Cannot correlate time of administration of last dose in mother with onset of symptoms in baby—except that if more than one week since last dose and delivery, infants usually asymptomatic.
4. Good correlation of severity of symptoms in baby and amount of mother's dosage. (Dosage correlate well with cost of drug i.e. price/bag.) Heroin may be mixed with lactose and cut with quinine.

Laboratory:

1. No change in blood pH, Ca, sugar, or bilirubin.
2. Heroin breakdown products excreted in urine and may be detected by chromatography (test for mother).
3. Peculiarity of masking jaundice—absence of jaundice associated with elevated bilirubin.

Mortality Rate:

In the untreated symptomatic babies varies between 50%-95%.

Progression to Death:

Inanation, dehydration, electrolyte imbalance, convulsions, coma, shock and death.

Treatment:

Must be individualized: To effect a balance between withdrawal symptoms and narcosis. To use only 1 at a time.

1. Paregoric 0.05 ml/lb. (1 drop/lb.) /per dose q.3.h. p.o. (use a U.S.P. standardized dropper 20 gtt/cc).
2. Chlorpromazine (Thorazine) 0.75-1.50mg/kg (per dose) TID I.M. or p.o.
3. Phenobarbital not effective against G.I. sypmtoms, 2 mg/kg (per dose) QID.
4. Reserpine—not very effective.
5. Morphine sulfate 0.06-0.1 mg/kg subcutaneous for emergency initial dose.
6. Methadone 0.3-0.5 mg q4-6h.

Duration of Rx:

1. In mild cases 4-7 days.
2. In moderately severe cases, treat at least for 2 weeks and then taper slowly over 3-4 weeks period.

THE TREATMENT AND REHABILITATION OF HEROIN ADDICTS

By Walter D. Meester, MD, PhD
Chester J. Maternowski, MD
James A. Millard, MD
Edward A. Jones, Jr., MD
Howard B. Huisman, PhD
William H. Kooistra, PhD
Grand Rapids

INTRODUCTION

Since March 1968, Project REHAB has been involved in the treatment and rehabilitation of drug dependent individuals living in the greater Grand Rapids area. The treatment program is divided into two sections. One, for the treatment of individuals abusing *soft* drugs, such as marijuana, LSD, STP, amphetamines, barbiturates, etc.; and another section dealing with the treatment of *hard* drug abusers, such as heroin addicts. This report is confined to a discussion of the latter.

Prior to September 15, 1969, approximately 25 heroin addicts from this community sought help at Project REHAB. During that time we did not have a carefully controlled coordinated narcotic addiction rehabilitation program such as we presently have. The treatment then merely consisted of writing a methadone prescription for the patient and supporting him psychologically by group therapy and sometimes individual counseling. Most of the prescribed methadone tablets ended up on the illegal market and very few of the patients reduced their use of heroin. Nevertheless, one of these earlier patients became completely rehabilitated and drug free and is now working as a narcotic addiction counselor at Project REHAB.

The purpose of this report is to present a description of our current program and the results obtained in 74 heroin addicts who voluntarily came to Project REHAB between September 15, 1969 and January 15, 1971.

METHODS

Basically only two treatment modalities are used in our program. The patients, depending on their individual situations, are either offered short term detoxification or long term methadone maintenance and/or sometimes a combination of the two. The main difference between the two methods is merely the *duration* of the treatment. Otherwise, except for a few minor differences, these two modalities are the same. Both are based on an outpatient program. No hospitalization is required; neither is a drug-free community residence utilized.

Eligibility requirements: Only patients who *voluntarily* seek help for their addiction are accepted to the program. Those who have legal compulsions whereby enrolling in our program becomes a condition of probation or parole are generally not accepted. Non-residents of Kent County or patients who have major medical complications such as alcoholism, schizophrenia, epilepsy, etc., are not eligible. All patients accepted for methadone treatment must sign a written informed consent. Patients under 21 years of age are required to have a parent or a legal guardian sign the consent form.

Selection of patients and mode of treatment: The addict is first interviewed by a narcotic addiction rehabilitation counselor (an ex-heroin addict). The initial history is taken. This includes the drug-, the social-, and the employment history. If it is evident that the patient is well motivated and sincere in his desire to kick the habit, he is then seen by a physician for a complete medical history, a physical examination, and X-ray and laboratory tests, if indicated. Also, serial samples of urine are obtained from the patient for analysis for narcotics, barbiturates and amphetamines. Only patients in whom the urine shows evidence of heroin addiction are processed for further evaluation and treatment. Each patient is then evaluated by a Medical Therapy Committee which

---

The authors are members of the Medical Therapy Committee of Project Rehab, an organization in Grand Rapids dealing with the treatment and rehabilitation of drug dependent individuals. Drs. Meester, Maternowski, Millard, and Jones are members of the active staff of Blodgett Memorial Hospital; Dr. Huisman is a research associate in the research department of Blodgett; and Dr. Kooistra, the founder of Project Rehab, is a practicing clinical psychologist.

meets bi-weekly. This Committee consists of 3 physicians, 6 nurses, 2 drug addiction counselors, 1 psychologist, 1 chemist, 1 pharmacist, 1 social worker, 1 laboratory technician, and 1 medical secretary. Most of these persons are involved in our program on a part-time or voluntary basis. Only the social worker and the drug addiction counselors are full-time.

Acceptance to the program and the mode of treatment are determined by the members of the Therapy Committee.

Patients with a history of a short period of addiction are generally placed in the detoxification program, whereas those addicts who used heroin for a long period of time are usually placed in the methadone maintenance group. Generally it takes two to three weeks to process each patient.

Individualized treatment: Once accepted for treatment, the patient is asked to come to the rehabilitation center every day (7 days a week) at a given time either between 10 a.m.-1 p.m. or 3 p.m.-6 p.m. He is required to submit a daily specimen of urine, which is carefully monitored by one of the drug addiction counselors. These urines are analyzed in the Research Laboratory of Blodgett Memorial Hospital for the presence of narcotics and other drugs. After the patient has provided the nurse with a sample of urine, she administers a dose of liquid methadone diluted in Tang to the patient. The patient does not know the dose of methadone he is receiving. The dose for a patient who is being detoxified is gradually reduced. The dose for a patient on methadone maintenance is individually adjusted to a satisfactory stabilizing level.

Each patient is required to attend a weekly group therapy session led by a part-time psychologist. Individual counseling is also offered to patients requiring this. Daily contacts between the patient and the drug addiction counselor are established. Job employment assistance and family counseling is offered to each patient by the social worker.

Each patient is asked to pay a token fee of $5.00 per week to partially defray the cost of the treatment.

Assessment of the treatment: Bi-weekly meetings are held by the Therapy Committee to evaluate the progress of each patient. The patients are evaluated on the basis of their drug urinalyses, group therapy attendance and participation, "family" involvement, social contacts, work attendance, nurses' reports and personal attitudes.

In addition, the patients are required to complete a weekly activity summary sheet in which they answer questions with regard to their drug use, social activities, family life, job problems, medical problems, etc.

Each patient's progress is compared to the progress the group makes as a whole.

Disciplinary actions: Patients who do not abide with the rules and regulations of the treatment program may be temporarily suspended by the Therapy Committee. Those who in spite of repeated warnings continue to "shoot" heroin may be dropped from the program for a minimum of six months.

Flexibility of the program: Patients who for emergency reasons such as a funeral of a close relative, sickness, accidents, or other, are unable to come to the center are given a supply of individual doses of liquid methadone in orange juice sufficient to carry them over for the period of time they cannot come to the center. A covering letter of explanation accompanies these doses. Those who must go to jail are generally detoxified.

Patients who have been "clean" for a long period of time, e.g., six months, may be asked to submit samples of urine at less frequent intervals. Collections of these urine specimens are always irregular and by surprise in order to prevent escape of detection of the use of heroin.

Some patients who have remained heroin free for an extended period of time may, upon request, gradually be detoxified.

RESULTS

General observations: During a sixteen-month period, 74 heroin addicts came to Project REHAB to seek help for their addiction. All of these patients received a complete evaluation, including a drug-, social-, and medical history, a physical examination, drug urinalyses, routine laboratory tests, and in some instances X-rays and special laboratory tests. In all but one patient, the diagnosis of heroin addiction could be confirmed. Four patients did not satisfy the residency requirements and one patient was found to be very poorly motivated. Thus, 68 patients were accepted for treatment. After the interim period (usually two to three weeks), 9 patients failed to show up for treatment. Four of these patients had sought the assistance of a private medical doctor and 5 patients evidently lacked sufficient motivation to go through with the treatment. Thus, 59 patients received treatment. Most of these patients enrolled in the methadone maintenance program. Only 13 patients were placed in the acute detoxification program.

TABLE I

	Total Group (74)	Methadone Maintenance (46)	Detoxification (13)
AVERAGE AGE (yrs)	30	33	22
AVERAGE DURATION OF ADDICTION	5 yrs 8 mo	7 yrs	14 mo
RACE			
Black	43	30	4
White	21	7	9
Mexican and Puerto Rican	10	9	0
SEX			
Male	64	40	11
Female	10	6	2
MARITAL STATE			
Single	33	18	7
Married	36	24	6
Separated	5	4	0
JAIL RECORD			
Yes	60	38	9
No	14	8	4
EMPLOYMENT			
Yes	25	20	2
No	49	26	11

Table I shows some pertinent information with regard to age, sex, race, marital state, average duration of addiction, employment, and jail record. As can be seen, those patients placed in the acute detoxification program are much younger and have a shorter duration of addiction than those placed on methadone maintenance. The racial distribution was about 60% negro, 30% white, and 10% Mexican and Puerto Rican. About one out of seven addicts was a female. Most of these supported their habit by prostitution. Although many of the patients had been involved in crimes prior to becoming addicted, once addicted, about 80% of the addicts engaged in criminal activities in order to support their drug habit. The "hustling" they engaged in included breaking and entering, robbery, forging of checks, pimping, prostitution, con games, purse snatching, short-changing, shoplifting, gambling, small time narcotics peddling, etc. All but one patient admitted to starting their drug use by first getting high on marijuana. About 70% grew up in the ghetto. The average amount the addicts spent daily to buy their "fixes" was $35 (a range of $7 to $80 a day).

Patient enrollment, group attendance, weekly fees, and employment assistance: The controlled treatment program was started with four hard-core criminal heroin addicts and during the first month of the program, three additional addicts enrolled. During the succeeding months the enrollment was gradually increased to a maximum of 32 patients in the ninth month. Currently, there are 20 patients on the program.

The attendance at group psychotherapy meetings varied from 50 to 60% until a disciplinary rule was established during the latter part of last year which states that anyone not attending group sessions without a legitimate excuse will be dropped from the program. Since then, group attendance has increased to nearly 90%.

A weekly fee of $5.00 was collected from each patient on the first day of the week; however, those patients who were unemployed and did not have any money to pay, were allowed to pay their fee by performing various duties in the rehabilitation center.

As far as employment is concerned, a total of 37 patients were unemployed when they enrolled in our treatment program. With the assistance of our social worker, 13 of these patients were able to find gainful employment while on the program.

Disciplinary actions: Eleven patients were dropped from the program because of continued use of heroin. All of these patients developed a lack of proper motivation to clean up and many of them had a poor attitude especially as to group attendance, "family" participation, and legitimate employment. A few of these patients exerted a bad influence on other patients in the program who sincerely tried to clean up. Figure 1 shows a graph relating the results of the drug urinalyses and the number of weeks the patient was allowed to remain on the program.

Those who gave no indication or little indication of reducing their use of heroin were the ones

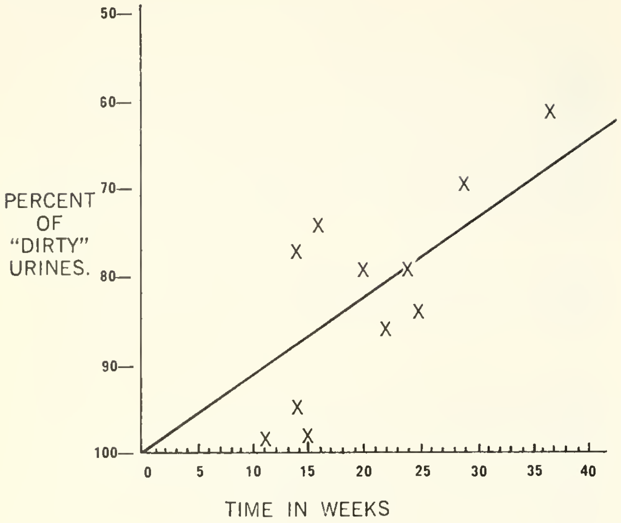


Figure 1: Graph of Patients Dropped for Continued Heroin Use

dropped the soonest; whereas, those who showed some promise as to cleaning up were allowed to remain on the program for a much longer period of time. No one was dropped before a ten week trial. All of these patients received extensive counseling, repeated warnings, and a contract prior to being dropped from the program.

Drug urinalyses: The results of the individual drug urinalyses were compiled on a weekly basis and during the last two months of the program shown to the patients themselves. The revealing of the urine results to the patients may have had a positive psychological effect as can be seen from Figure 2, which depicts a graph in which the urine results are plotted on a monthly basis. The urine samples of patients who consistently show to be clean are sometimes pooled so as to reduce the expense of the urinalyses. Members of the staff of Project REHAB are from time to time requested to submit a sample of urine of themselves for drug analysis.

Summary of progress and follow-up on patients: Figure 3 shows progress and follow-up data an all heroin addicts who voluntarily came to Project REHAB between September 15, 1969 and January 15, 1971. These data indicate that currently 5 patients are drug free, 21 patients are still receiving treatment, 18 are in jail, 24 are still "shooting" heroin on the street, 4 are non-residents, 1 patient died of an overdose of heroin, and the status of 1 patient is unknown to us.

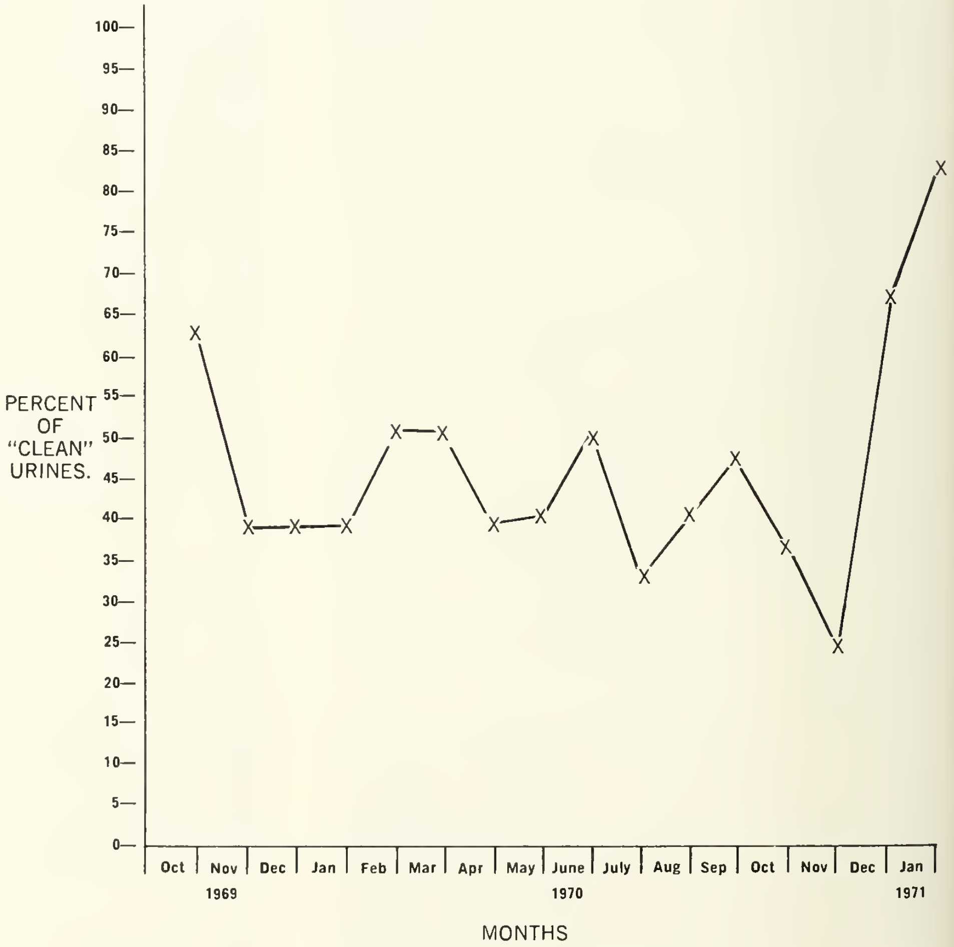
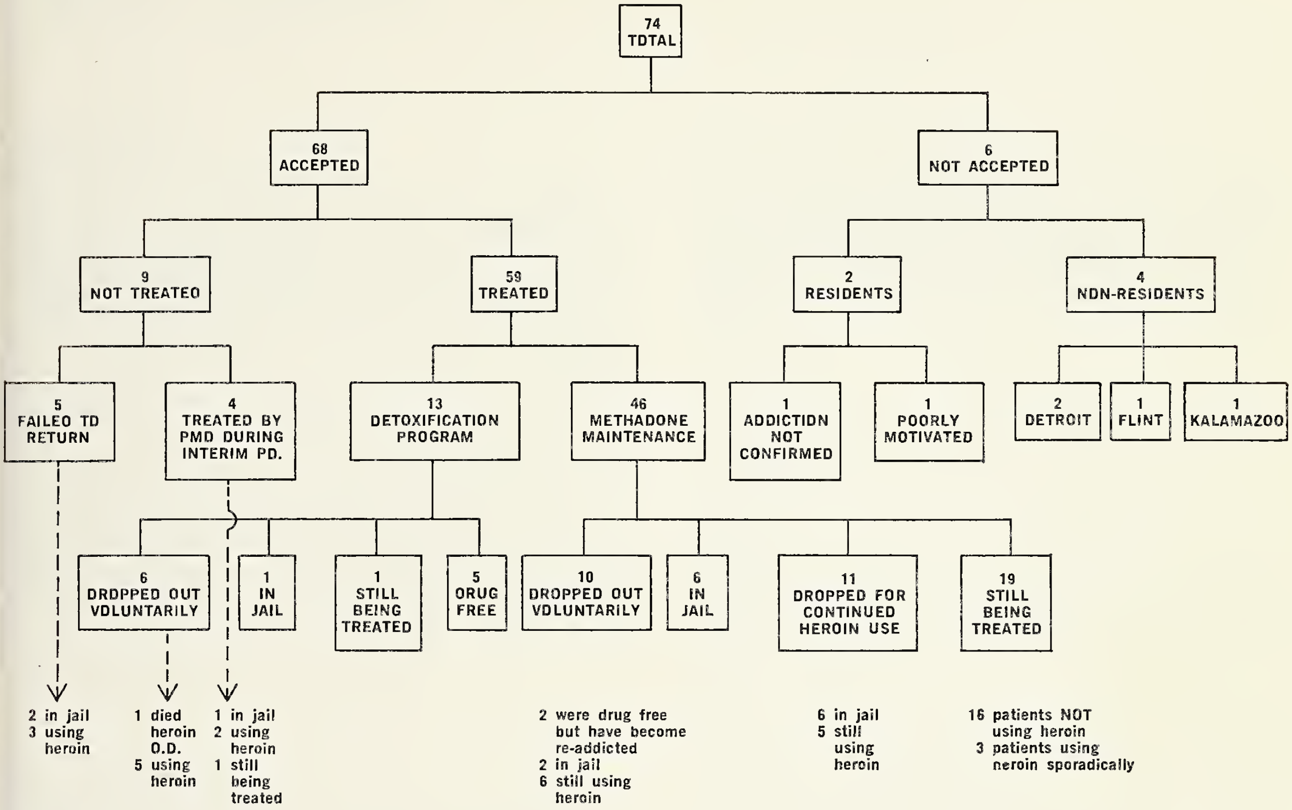


Figure 2: Results of Drug Urinalyses

Figure 3

Data on heroin addicts who voluntarily came to Project REHAB between Sept. 15, 1969 and Jan. 15, 1971.


74 TOTAL
68 ACCEPTED
6 NOT ACCEPTED
9 NOT TREATED
59 TREATED
2 RESIDENTS
4 NON-RESIDENTS
5 FAILED TO RETURN
4 TREATED BY PMD DURING INTERIM PD.
13 DETOXIFICATION PROGRAM
46 METHADONE MAINTENANCE
1 ADDICTION NOT CONFIRMED
1 POORLY MOTIVATED
2 DETROIT
1 FLINT
1 KALAMAZOO
6 DROPPED OUT VOLUNTARILY
1 IN JAIL
1 STILL BEING TREATED
5 DRUG FREE
10 DROPPED OUT VOLUNTARILY
6 IN JAIL
11 DROPPED FOR CONTINUED HEROIN USE
19 STILL BEING TREATED
2 in jail 3 using heroin
1 died heroin O.D. 5 using heroin
1 in jail 2 using heroin 1 still being treated
2 were drug free but have become re-addicted 2 in jail 6 still using heroin
6 in jail 5 still using heroin
16 patients NOT using heroin 3 patients using heroin sporadically

DISCUSSION

As can be seen from the results, even in a well-controlled treatment program with rigidly built-in rules and regulations, the number of drug free and totally rehabilitated heroin addicts remains small after a sixteen-month concentrated effort of treatment and rehabilitation. Although five of the heroin addicts treated in our program remain drug free, there is no guarantee that any of these patients may not return to the use of heroin within a short period of time. Two of the heroin addicts who voluntarily discontinued the methadone maintenance program were drug free for a period of six months prior to becoming re-addicted again. One of these patients has returned to Project REHAB for treatment.

It seems clearly evident from our data that the success of the treatment of young patients who have not been addicted for a long period of time is much greater than of the older addicts who have been using heroin for a long time.

Since methadone maintenance is a treatment modality for heroin addicts requiring long-term therapy, it is not possible for us to come to any meaningful conclusions at this time as to the per cent of success of our methadone maintenance program, since we have only been in operation sixteen months. Many of the patients currently on this program are heroin-free and well on the way to total rehabilitation.

The fact that so many of the addicts ended up in jail, clearly shows that virtually every "junkie" ultimately goes to jail unless he makes a serious effort to kick his drug habit. Some of the heroin addicts who enrolled in our treatment program had cases pending against them prior to starting on the program. However, of those who dropped out voluntarily or those who were dropped for disciplinary reasons, a large percentage are now in jail. Three of the patients who were dropped for continued use of heroin are now serving 20 to 21 years in Jackson Prison.

In spite of the relatively low yield of completely drug-free patients, the program has provided significant economic savings to the community. Based on the daily amount of money each patient spent on heroin prior to enrolling in the treatment program, it was estimated that the group as a whole *would* have spent $300,000 for heroin alone if no treatment had been provided. Based on the number of times that the patients' urine samples were clean while on the program, an estimated $160,000 otherwise used for heroin, was saved to the community. The actual financial savings to the community are thought to be much greater, since most

Michigan Authors

Duane L. Block, MD, Dearborn, "The Relationship between Occupational Medicine and the Community," page 1213 *Bulletin of the New York Academy of Medicine,* October, 1971.

Milton W. White, MD, Detroit, "Discovery and Significance of Proteinase Enzyme X, Oxidizing Enzyme X, in Cancer and Leukemia Pathogenesis," May 1971, Wayne State University Printing Department. Write: Director of Department of Research, North Detroit General Hospital, Detroit.

G. W. Bissell, MD, Allen Park, "The 'Doctor's Lady,' " page 98, *Journal of the American Medical Association,* Oct. 4, 1971.

W. S. Reveno, MD; R. B. Bauer, MD; H. Rosenbaum, MD, Detroit, "L-dopa treatment of Parkinsonism, Clinical observations on the use of amantadine hydrochloride," page 61, *Geriatrics,* Aug., 1971.

PROJECT REHAB/Continued

of the addicts told us that they had to steal to support their habits and since a fence only pays one fifth of the value of stolen goods, the figure of $160,000 should be multiplied by five. In addition, the treatment program undoubtedly reduced the amount of crime in the community, resulting in a reduced cost of apprehending, trying, and jailing; not even to mention the welfare costs otherwise paid to the addict's family.

Aside from the material savings, however, more important, we feel that we have significantly reduced the threatened lives, the wasted potential, and the misery of several addicts and their loved ones.

RECOMMENDATIONS

Based on our experience gained during the past sixteen months, it is evident to us that outpatient treatment alone, either by acute detoxification or methadone maintenance is not sufficient to successfully rehabilitate a substantial number of addicts. It is our recommendation that serious consideration be given to the establishment of a long term residential abstinence program, requiring the patients to live in a drug-free community house and function like a "family" member there for an estimated stay of 12 to 18 months, during which time the resident re-enters the community in graduating stages. In addition, it is our recommendation to expand the current therapy staff at Project REHAB to include a part-time psychiatrist, an experienced psychiatric social worker and a first-class executive secretary who can function as an administrative assistant. Also, the hiring of another full-time drug addiction counselor (an ex-heroin addict) may be necessary.

SUMMARY

During a sixteen-month period, 74 heroin addicts voluntarily came to Project REHAB to seek help for their addiction. Two treatment modalities were used for those accepted on the program. Of the 59 patients treated, 46 were placed on methadone maintenance and 13 were placed in the detoxification program. So far 7 patients successfully kicked their drug habit; however, 2 of these patients have become re-addicted. Currently, 20 patients are still under treatment. The results, in spite of the low yield of drug free patients, appear to be encouraging, especially if one considers the considerable alleviation of the misery of several patients and their loved ones and the sizable economic savings to the community in terms of reduction of total heroin use, decrease in crime, increase in employment, and decrease in welfare costs. Based on this experience, a recommendation is made to expand the current therapy staff as well as to come to the establishment of a drug free community residence for a long-term abstinence program.

THE PSYCHODYNAMICS OF THE 'BAD TRIP'

By Gordon R. Forrer, MD
Plymouth

The term "bad trip," although its origins cannot be precisely pinpointed, graphically conveys its meaning. The term refers to a reaction to a variety of drugs, most frequently an acute devastating sense of anxiety in response to lysergic acid (LSD). The "bad trip" is not rarely experienced as an immediate or *ex post facto* response to marijuana. The acute alarming nature of the subjective perceptions and the feelings of overwhelming panic experienced during a "bad trip" alone endow the reaction with a psychological significance. This is especially so since a "bad trip" can be precipitated many months after a "bad trip" evoked by drugs; the second occurring "spontaneously" and being in almost every way indistinguishable from the first one.

So that the reader may have a better idea of how the experience is perceived, I present the following illustrations:

Case 1: The patient is a young woman, a talented musician and singer, who has been employing affect-altering drugs for several years. These include the barbiturates, marijuana, hashish, amphetamines and lysergic acid. She had one "bad trip" which so frightened her that she determined to renounce the use of all drugs and seek psychiatric assistance. The major impact of the "bad trip" was her feeling of abandoned loneliness, of being suddenly in the midst of a void where human contact was distant, unattainable and longed for. She endured the fearful experience of sensing her body altering its shape and definition. Her entire perception seemed to her to have become blurred and indistinct. She felt herself to be living in a "never-never land" and had, at the time, a conviction that her world would be this way forever. Some six or seven months after this horrifying, threatening experience, and having given up the use of all drugs, she was walking one afternoon in a wide-open area of the college she attended when suddenly and inexplicably she was seized with an intense feeling of emptiness, loneliness, and isolation. Particularly distressing and alarming was the feeling that she no longer knew her own identity. She could have given her name but she felt herself at this moment to be a non-person; human in form but without roots in reality or emotional attachments to anyone. A curious, hardly desirable floating feeling engulfed her and everything about her, the buildings in the distance, the ground on which she walked, appeared distant, strange and isolated from her personal grasp and knowledge. A rising sense of panic inundated her and she felt convinced that she was "going out of my mind." She began to run, discovering in doing so that the muscular activity somehow re-established somewhat her sense of reality. She ran up to a young man who happened to be in the vicinity. She felt compelled by an inner demand to touch him, to feel body contact with another human. She announced to him that she was afraid she was going out of her mind and begged him to talk to her. He was understandably interested in finding out who she was and what had happened to evoke her obvious distress. She put aside his questions and demanded instead that he tell her about his classes, about his girl friend and "about anything at all just so he kept talking." How long he accommodated her is uncertain but she thought in retrospect that it might have been as long as an hour. However long it was, after a time she calmed down. The delayed "bad trip" thus ebbed away under these circumstances. She subsequently viewed this experience with dread anticipatory apprehension. She apprehended the memory of it as though it were some kind of a mysterious apparition.

Case 2: The second patient is an eighteen-year-old high school student. He has been smoking "pot" for about a year, and he likes to get "stoned" with his friends. He had a "bad trip" in relationship to smoking the drug, after which he gave up his custom. He does not recall very well what this was like. Practically devoid of content he vividly recalls his memory of a horrifying feeling of expanding emptiness and of being "dropped into an abyss" and being bereft of all human relatedness. He was terribly frightened by this experience, after which he finally agreed that he had reason to seek understanding from a psychiatrist. A number of months after this drug-induced "bad trip" he traveled by train to a city several hundreds of miles away. He arrived there late at night, tired and unable to contact friends who were to have met him. He found himself in a large vaulted, almost deserted train station and was unhappy about his plight. He recalls not the content of his mind but whatever his thoughts they were

---

Doctor Forrer is in private practice and is chief of psychiatry at Mt. Carmel Mercy Hospital, Detroit.

interrupted by the ringing of a pay phone which remained unanswered for a considerable period of time. He felt rising anger that no one answered it, yet he had no thought of doing so himself. Someone seems to have finally done so and the cessation of the repetitive phone bell was related, in his mind, to what followed. He suddenly felt isolated, alone, and totally abandoned. A feeling of unreality descended upon him. It was as though he did not recognize anything about himself despite the fact there was nothing he could not correctly identify. He knew where he was but in a clouded way. He was fearful that he was in imminent danger and might "lose myself as a person." In turn he imagined that other people in the station were looking critically at him. Only moments before these same people had no particular significance for him. He felt horribly "lonely" and, as on the occasion of the drug-induced "bad trip," experienced a feeling of being dropped into "an abyss." An intense impulse to run to some other person and touch and be touched by him in turn alarmed him. He controlled this impulse, recognizing despite the intensity of his feelings the inappropriateness of such behavior. Instead he found a relief, a lessening of his panic, by pacing around the station. He was unable to estimate how long he did so. After a time the "bad trip" ebbed away to remain a never-to-be-forgotten "nightmare."

In both cases we observe the replay of a "bad trip" some considerable period of time after a preceding drug-induced one. The drug taker's first bad trip occurs under the influence of affect-altering drugs. His account of this is not always very informative because of the obtundation of the senses accompanying the pharmacological effects of the drug. The recurrence of a "bad trip" in a state of clear conciousness where there has been no obtundation of the senses by some pharmacological substance brings the "bad trip" into much more precise descriptive focus. Generally speaking there occurs an evolving sense of isolation, loneliness, fear of loss of the self, intense helplessness and inadequacy, and an intense desire for bodily contact with another human. Muscular activity has the effect of partially restoring the sense of reality.

The content of the mind at these times does not overtly reveal the underlying psychodynamics of this reaction. The recognition of the regressive nature of the response can hardly be avoided but the regression to a specific fixation point is not obvious. Before a psychodynamic correlation can be established it is necessary to review a psychophysiological event with which, because of the recentness of its discovery, the reader may be unaware.

During the earliest months of infancy the infant "merges" each time it suckles. One may observe during these times that his eyelids half or completely close and that his eyeballs roam around aimlessly in their sockets. The infant clearly relinquishes what small degree of ego-differentiation he has achieved to this point in his development in favor of "going on a trip." He regresses to a psychological state approximately that at the time of his birth. This "merging" phenomenon repeats itself at nursing times until, at about three months of age, an increasing ego self-awareness recognizes and then responds with anxiety to it. The infant's developing ego brings him into confrontation with a paradox: either he suckles and loses touch with his ego via "merging" or he maintains the functional integrity of his ego by not suckling and suffers the pain of hunger. After a brief period of inner turmoil during which external manifestations are readily observable but generally discounted in ignorance of their significance, the infant finds his solution to the paradox by continuing to suckle as before but by altering the psychological position from which he does so. Henceforth, as he nurses he goes into "raptus." The observable manifestations while suckling are dramatically altered. The baby now stares open-eyed, with widened palpebral fissures, straight to the front, unfocusing, unseeing and unblinking when he nurses. A hand passed through his line of sight does not distract him from the "trip" he has taken from complete contact with his surrounding circumstances. At nine months of age his progressively developing ego perceives and finds threatening the once pleasurable phenomenon of "raptus." The regression of removing one's self from the psychological present is experienced as threatening by an ego increasingly jealous of its integrity. As in the earlier described perception of "merging" the infant is confronted with a dilemma not unlike the one faced at the age of three months. If he suckles he goes into "raptus," relinquishing hard earned and valued definition of relationship with objects. On the other hand, if he does not suckle he must endure the ego-threatening pangs of hunger. Out of this paradox a solution evolves. Ordinarily this is achieved through the attainment of the adult mode of eating and the repression of "raptus." Henceforth the infant maintains his relationship to objects outside himself. He no longer takes a "trip" each time he eats. It is at this period of his life that mothers often complain that their babies have become so easily distractible that their interest in eating a meal is interrupted. In actuality such distractibility is the outward manifestation that the baby has now weaned himself and no longer "goes on a trip" of any kind when he eats.

It seems patently evident that an individual chooses to get "smashed" or "bombed" or "drunk" just because he finds satisfaction in the dissolution and attenuation of his ego. He finds it so because the alteration of his affective, perceptive and integrative capacities reproduce or replay the psychological circumstances of infantile life which are similarly characterized during the phenomena of "merging" or "raptus." There is, of course, the other side of the coin. The merging or raptus responses are perceived as attractive dangers. They hold promise of great pleasure but they also offer great threats to ego integrity. The "bad trip" seems to correlate quite remarkably with what one can postulate would be the panic response of an infant confronted with the first-time consciousness of the experience of merging or raptus. Unquestionably the infant experiences a "bad trip" which convinces him of the regretful necessity of eschewing forever the merging or raptus responses to which he has been attached and in which he found gratification for such a long period. This would be the ideal solution to the merging paradox. However, the solution is not so neatly accomplished by everyone. Those who retain a lingering urge to return to gratifications of merging and raptus are candidates for a "bad trip" when taking affect-altering drugs.

As far as I have been able to learn, the "bad trip" is evoked by circumstances of personal loneliness. It seems to me that feelings of emptiness kick off or evoke the replay of an earlier "bad trip" (the one which is experienced by each and every one of us as part of the maturation process but which exercises a "total attraction" for the victim). I think it is worthwhile to recognize that genital sexuality *per se* plays no discernible role in this phenomenon. The urge is for bodily contact; the idea being that this will help to re-establish one's identity and sense of being a person. The sex of the person sought makes no more difference than the sex of the infant's feeder. Availability seems to be the guiding factor. It is human contact that is required, reminiscent, of course, of the experience of the infant of being held in the arms of adults.

Having thus identified the origins of the "bad trip" and described the underlying psychophysiological replay which it represents a further detail attracts our attention and calls for explanation. What about the curious matter of muscular activity and the impression that this will help to establish the boundaries of the self? This particular feature is probably likewise traceable to the person's infantile time of life. One has only to watch an infant nursing at breast or bottle to be aware of the frequency with which his hands clutch and manipulate. Whether at earlobe, bottle, blanket or other object, I believe that this behavior has to be considered part of the infant's effort to partially counter the effect of the merging or raptus to which he regresses while nursing. This muscular activity can probably be considered part of the attempt to discount or nullify the threatening aspects of merging and raptus while at the same time preserving the gratifying components thereof. It is undoubtedly significant that once the adult mode has been achieved, this grasping, kneading, muscular behavior ceases. This cessation can be interpreted as signifying that the behavior loses its ego-preserving function once the infantile mode has been finally renounced.

I have presented the psychodynamics of the "bad trip." It can be understood and recognized as a wordless replay of psychophysiological events occurring at two nodal points of the infant's life, namely, at three and nine months. The event of a "bad trip" in adult life is evidence that the weaning process was not entirely completed by the individual at the expected time during his infancy and that the adult mode was never completely achieved. How far the "bad trip" advances the maturation process, if indeed it does at all, remains unanswered for the moment.

REFERENCE

Forrer, G. R.: *Weaning and Human Development;* Libra Publishers, Inc., Roslyn Heights, N.Y., 11577. 1969.

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health

For the Five-Week Period Ending October 1, 1971

	1971 This 5-Week Period	1970 Same 5-Week Period	1971 Total To Above Date	1970 Total Same Date	Total Cases for 1970
Rubella	78	79	2,679	2,700	3,012
Congenital Rubella Syndrome	0	0	1	0	2
Measles	83	43	2,345	1,725	1,834
Whooping Cough	13	31	101*	153	195
Diphtheria	—	—	—	—	—
Mumps	141	154	9,572	5,059	7,825
Scarlet Fever & Strep Sore Throat	383	432	8,480	8,621	11,863
Tetanus	0	0	2	4	8
Poliomyelitis (paralytic)	0	0	0	1	2
Hepatitis	405	436	3,683	3,475	4,594
Salmonellosis (other than S. typhi)	92	68	528	500	665
Typhoid Fever (S. typhi)	2	3	6	11	14
Shigellosis	30	17	159	151	225
Aseptic Meningitis	35	109	146	209	296
Encephalitis	9	20	91	108	155
Meningococcic Meningitis	2	6	54	55	69
H. Influenza Meningitis	4	0	62	37	61
Tuberculosis	183	168	1,419	1,508	2,006
Syphilis	390	339	3,258	2,796	3,900
Gonorrhea	2,187	2,271	15,869	15,426	20,676

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

* corrected total

The History of Birth Contro

After a 4,000-year search, have women finally found freedom?

Abortion and infanticide have, throughout history, been the final and desperate resort of women who were unable to control their fertility, but for almost 4,000 years they have sought ways to prevent conception.

In ancient Egypt they used pessaries of crocodile dung or tried to clog the motile sperm with honey and a gumlike substance. The women of Islam used tampons of pomegranate pulp and rock salt. In Japan they burned little balls of "burning grass" on the *mons veneris* or, more practically, tried to cover the mouth of the uterus with disks of oiled bamboo tissue paper. In th 18th Century in France upper-class women rediscovered the vaginal sponge, a device mentioned in sources as old as the Talmud.

It may seem now that such advances as ora contraception and the IUD have freed wome from this often fruitless search and conseque suffering, but there are millions of women in United States and elsewhere who have less knowledge of, and less recourse to, contrace than Egyptian women of the Twelfth Dynast Nothing is more urgent to all of us than to bri them help. We cannot long support the ecolo pressures of an additional 70 million Earth inhabitants each year.

Searle contributions to the science of contraception

BOTH AVAILABLE IN 21- AND 28-PILL SCHEDULES

Ovulen® · Demulen®

Each white tablet contains: ethynodiol diacetate 1 mg./mestranol 0.1 mg.

Each white tablet contains: ethynodiol diacetate 1 mg./ethinyl estradiol 50 mcg.

Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Demulen (for its low estrogen and Searle's progestin) and Ovulen (with its wide physician and patient acceptance) offer almost complete contraceptive effectiveness and a low incidence of side effects—both with a choice of pill-taking schedules...simple "Sunday-starting" and patient-proof Compack® tablet dispensers.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain[1-3] leading to this conclusion, and one[4] in this country. The estimate of the relative risk of thromboembolism in the study of Vessey and Doll[3] was about sevenfold, while Sartwell and associates[4] in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations preexisting uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

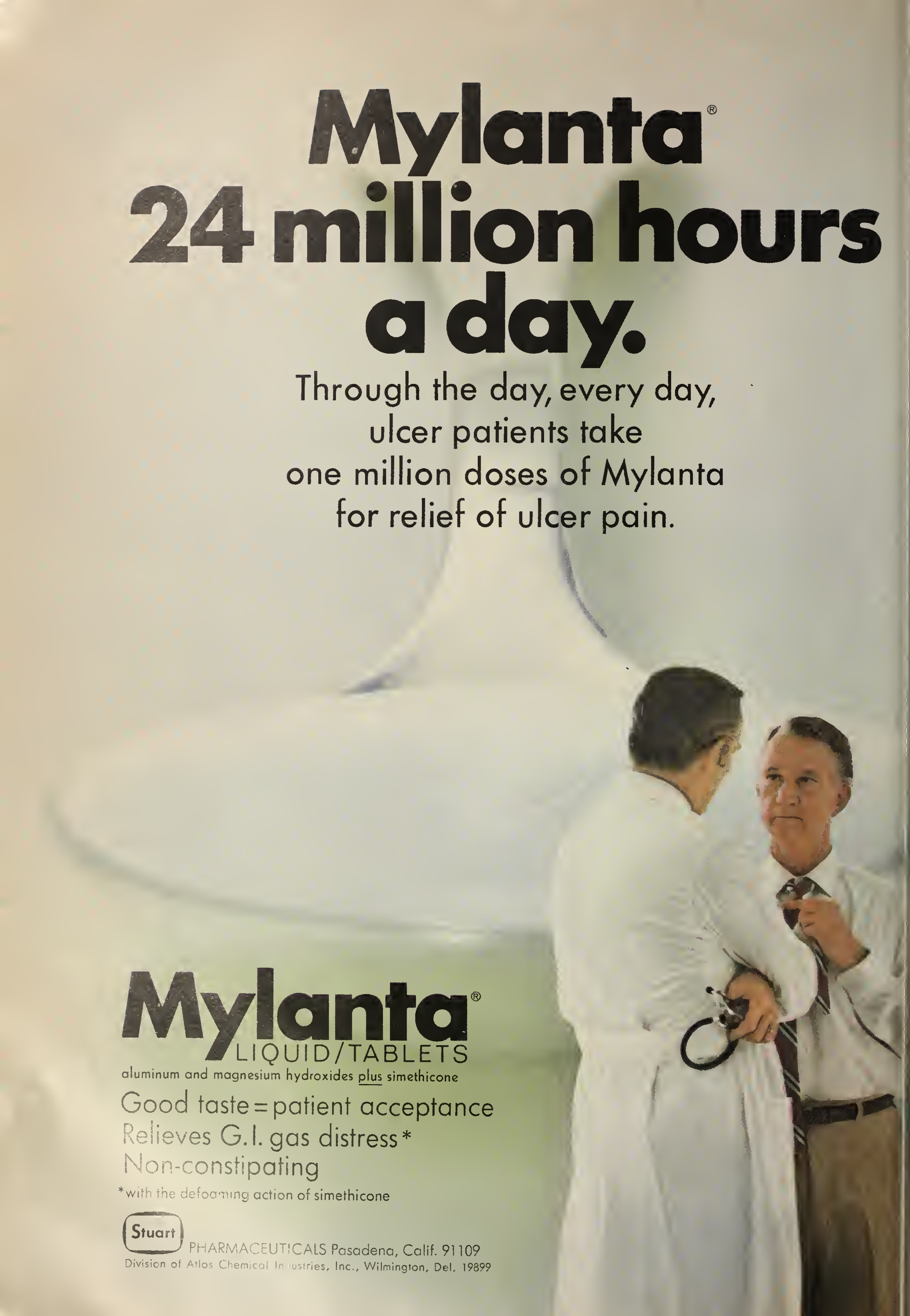
Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test and pregnanediol determination.

References: 1. Royal College of General Practioners: Oral Contraception and Thrombo-Embolic Disease, J. Coll. Gen. Pract. *13*:267-279 (May) 1967. 2. Inman, W. H. W., and Vessey, M. P.: Investigation of Deaths from Pulmonary, Coronary, and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Brit. Med. J. 2:193-199 (April 27) 1968. 3. Vessey, M. P., and Doll, R.: Investigation of Relation Between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Brit. Med. J. 2:651-657 (June 14) 1969. 4. Sartwell, P. E.; Masi, A. T.; Arthes, F. G.; Greene, G. R., and Smith, H. E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Amer. J. Epidem. 90:365-380 (Nov.) 1969. 1A7

SEARLE

OVULEN • DEMULEN
Manufactured by SEARLE & CO.
San Juan, Puerto Rico 00936
For more detailed medical information write:
G. D. Searle & Co., Medical Department
P.O. Box 5110, Chicago, Illinois 60680
Where "The Pill" Began



Mylanta®
24 million hours
a day.

Through the day, every day,
ulcer patients take
one million doses of Mylanta
for relief of ulcer pain.

Mylanta®
LIQUID/TABLETS
aluminum and magnesium hydroxides plus simethicone

Good taste = patient acceptance
Relieves G.I. gas distress*
Non-constipating

*with the defoaming action of simethicone

Stuart
PHARMACEUTICALS Pasadena, Calif. 91109
Division of Atlas Chemical Industries, Inc., Wilmington, Del. 19899

The girth control pill

Tepanil® Ten-tab®

(continuous release form)

(diethylpropion hydrochloride, N.F.)

When girth gets out of control, TEPANIL can provide sound support for the weight control program you recommend. TEPANIL reduces the appetite—patients enjoy food but eat less. Weight loss is significant—gradual—yet there is a relatively low incidence of CNS stimulation.

Contraindications: Concurrently with MAO inhibitors, in patients hypersensitive to this drug; in emotionally unstable patients susceptible to drug abuse.

Warning: Although generally safer than the amphetamines, use with great caution in patients with severe hypertension or severe cardiovascular disease. Do not use during first trimester of pregnancy unless potential benefits outweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation of therapy, unpleasant symptoms with diethylpropion hydrochloride have been reported to occur n relatively low incidence. As is characteristic of sympathomimetic agents, it may occasionally cause *CNS effects* such as insomnia, nervousness, dizziness, anxiety, and jitteriness. In contrast, CNS depression has been reported. In a few epileptics an increase in convulsive episodes has been reported. *Sympathomimetic cardioascular effects* reported include ones such as tachycardia, precordial pain, arrhythmia, palpitation, and increased blood pressure. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride; this was an isolated experience, which has not been reported by others. *Allergic phenomena* reported include such conditions as rash, urticaria, ecchymosis, and erythema. *Gastrointestinal effects* such as diarrhea, constipation, nausea, vomiting, and abdominal discomfort have been reported. Specific reports on the hematopoietic system include two each of bone marrow depression, agranulocytosis, and leukopenia. A variety of miscellaneous adverse reactions have been reported by physicians. These include complaints such as dry mouth, headache, dyspnea, menstrual upset, hair loss, muscle pain, decreased libido, dysuria, and polyuria.

Convenience of two dosage forms: TEPANIL Ten-tab tablets: One 75 mg. tablet daily, swallowed whole, in midmorning (10 a.m.); TEPANIL: One 25 mg. tablet three times daily, one hour before meals. If desired, an additional tablet may be given in midevening to overcome night hunger. Use in children under 12 years of age is not recommended.

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

I-3325 (2876)

Painful night leg cramps...

unwelcome bedfellow for any patient–
including those with arthritis, diabetes or PVD

One thing patients can sleep without, particularly patients with chronic disease conditions such as arthritis, diabetes or PVD, is painful night leg cramps. Although seldom the presenting complaint, night leg cramps can tie your patients up in painful knots. Now, just one tablet of QUINAMM at bedtime can usually bring an end to shattered sleep and needless suffering. Your patients will sleep restfully—gratefully—with QUINAMM, specific therapy to prevent painful night leg cramps.

Quinamm™
(quinine sulfate 260 mg., aminophylline 195 mg.)

Prescribing Information—Composition: Each white, beveled, compressed tablet contains: Quinine sulfate, 260 mg., Aminophylline, 195 mg. **Indications:** For the prevention and treatment of nocturnal and recumbency leg muscle cramps, including those associated with arthritis, diabetes, varicose veins, thrombophlebitis, arteriosclerosis and static foot deformities. **Contraindications:** QUINAMM is contraindicated in pregnancy because of its quinine content. **Precautions/Adverse Reactions:** Aminophylline may produce intestinal cramps in some instances, and quinine may produce symptoms of cinchonism, such as tinnitus, dizziness, and gastrointestinal disturbance. Discontinue use if ringing in the ears, deafness, skin rash, or visual disturbances occur. **Dosage:** One tablet upon retiring. Where necessary, dosage may be increased to one tablet following the evening meal and one tablet upon retiring. **Supplied:** Bottles of 100 and 500 tablets.

Merrell
MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

1-3326 (2877)

Specific therapy for night leg cramps

Emergency rooms are rapidly being converted into 24-hour OPD's. Hospitals provide more and more medical service in an almost geometric progression.

I question whether this is cheaper or better care. What happens when dollars run out on a capitation basis? Have you ever heard an HMO talked about where the promoters didn't expect to be supported by government or foundation grants? There is nothing new about the idea of salaried doctors. There is nothing new about the idea of prepaid care. Does an HMO do anything more than to put the two ideas together and add public funds to the mix?

The average consumer has already questioned the rising cost. It is no longer a question of ability to pay for service, but rather the patient's willingness to pay; large and powerful consumer groups no longer want to pay out-of-pocket dollars for care. But do grants from government lower total costs?

The AMA has already indorsed National Health Insurance through its Tax Credit Plan.

Where is the physician availability in the system of tax credits for health care on the national level? Certainly that expedient is not functional and does not get at the heart of the problem. Its approach is by default; it is neither what the consumer wants, nor what the politicians will accept.

Where do we go from here? Should the Federal government take care of those in need? If so, how?

The Federal government is already in deficit financing and its fiscal integrity leaves much to be desired. Just note where the dollar is going.

For instance,

Medical Foundations. This has become a popular catch-phrase in medical politics, again, what does it mean?

Should we in the medical profession become a trade union and become involved in collective bargaining? If so—how and with whom? Are we equipped with staff know how? What will a statewide Foundation do for the doctor and the consumer? Will it improve patient care?

Perhaps in Michigan this is an outgrowth of the inability of Michigan Medical Service to communicate its problems to the Michigan State Medical Society. The State Society hasn't done its job in cooperating, either, and a negative position has come to the forefront. Aren't those who think that a foundation can solve the problem kidding themselves?

I do *not* see the State Medical Society launching out in this area on a statewide basis. Perhaps it can be done on a county level; I'll have to be shown how it will work on any level.

As in the case of HMO's, the organizers of Foundations seek public funds to support them. Is that something our Society should get into?

For instance,

Relative Value Studies. Biennially, we perform an academic exercise—we shovel fog. Through the years, I haven't seen any statistical validity to the Michigan RVS, or any evidence of its fiscal impact. If it had validity, would we want it? Should this Society fix physician's charges? How can we accept the principles of usual, customary and reasonable for Federal Medical Programs and then set up a fee schedule called MRVS—it's really paradoxical.

Peer Review. Is another national catch-phrase. Perhaps we should go back to the term—Utilization Review—and study the frequency of use patterns of medical service in practice—both office and hospital. Study, yes. But control?

HEW has recently given grants to study this area to 29 medical societies. Federal government funding of hospitals, Medicare, Medicaid are methods of controlling doctors and patient care. If we don't want to be controlled, how far should our Society go into this field?

Item—

Improvement of Michigan State Medical Society. Here, I can make some definite proposals. The House of Delegates should meet twice a year. Things are moving too rapidly in the delivery of health care on the local, state and national levels. The medical profession is struggling for survival in its present form.

We should increase staff work to assist the House of Delegates and have in-depth reviews well in advance, so that the grass roots physician is made to realize what is going on.

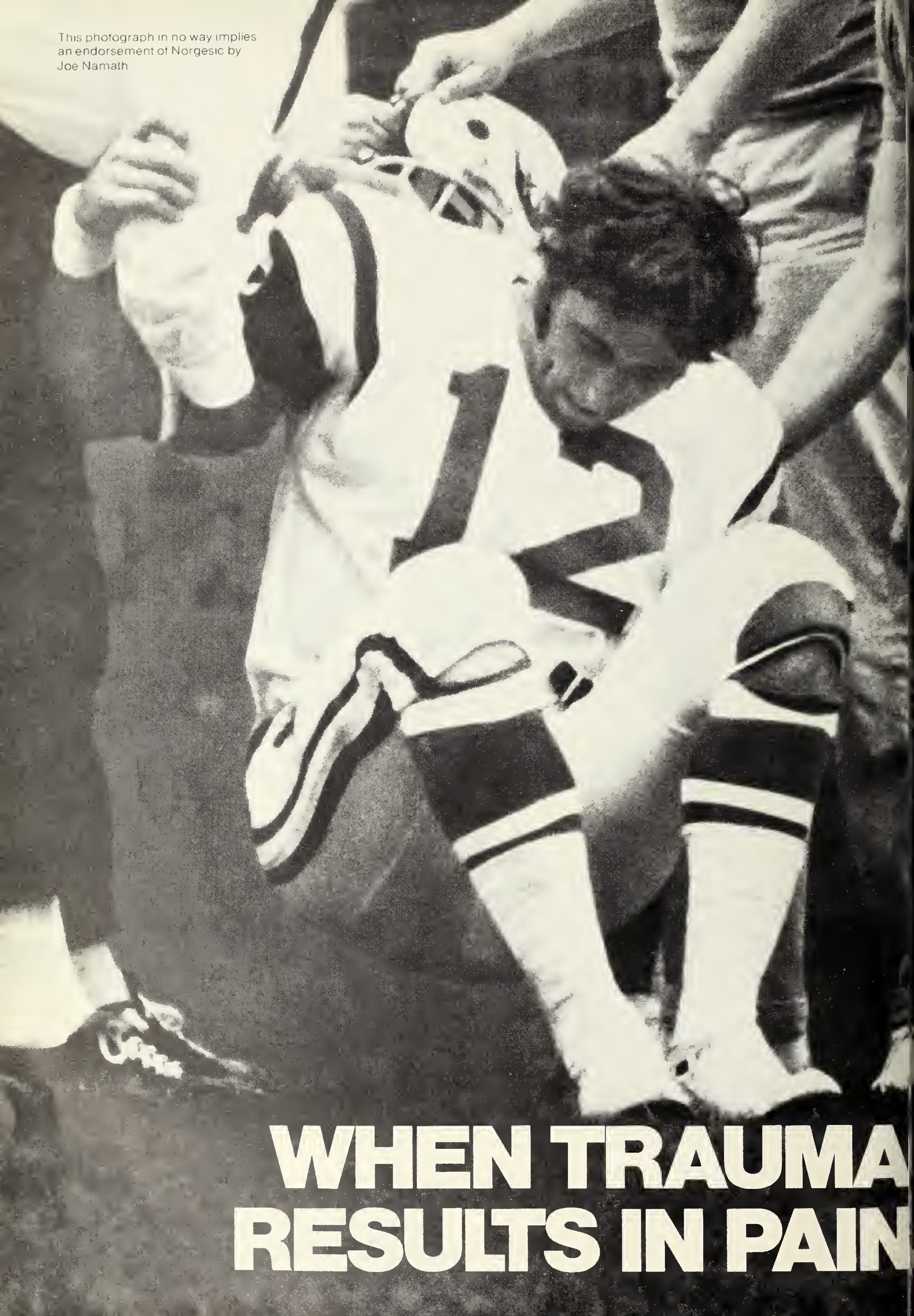
Item—

Michigan Blue Shield. Why shouldn't the House of Delegates elect the 36 members of Michigan Medical Service corporate body who in turn will elect the 12 physician members to the Blue Shield Board? Why should we let Blue Shield pick them for us? We help support legislative representatives in Washington and Lansing at heavy expense. Which has the greatest day-to-day effect upon us as physicians—legislatures or Blue Shield policy makers? We can put our people on the Blue Shield Board at no cost to the Society. Does it make sense not to?

* * *

Somebody is sure to say that we can't turn back the clock, and that's true. It also can be said that

(Continued on page 1028)



This photograph in no way implies an endorsement of Norgesic by Joe Namath

WHEN TRAUMA
RESULTS IN PAIN

NORGESIC®

(orphenadrine citrate, 25 mg.; aspirin, 225 mg.;
phenacetin, 160 mg.; caffeine, 30 mg.)

the versatile analgesic

offers fast onset of symptomatic relief

produces a high level of analgesia

affords sustained pain relieving action

provides predictable relief—
overall satisfactory response in
approximately 80% of patients

Contraindications: Because of the mild anticholinergic effect of orphenadrine, Norgesic should not be used in patients with glaucoma, pyloric or duodenal obstruction, achalasia, prostatic hypertrophy or obstructions at the bladder neck. Norgesic is also contraindicated in patients with myasthenia gravis and in patients known to be sensitive to aspirin, phenacetin or caffeine.

Since mental confusion, anxiety and tremors have been reported in patients receiving orphenadrine and propoxyphene concurrently, it is recommended that Norgesic not be given in combination with propoxyphene (Darvon®).

Warnings: USE IN PREGNANCY: Since safety of the use of this preparation in pregnancy, during lactation, or in the child-bearing age has not been established, use of the drug in such patients requires that the potential benefits of the drug be weighed against its possible hazard to the mother and child.

USE IN CHILDREN: The safe and effective use of this drug in children has not been established; therefore, the physician must weigh the benefits against the potential hazards.

Precautions: It has been reported that prolonged or excessive use of phenacetin may result in nephrotoxicity. Caution, therefore, should be exercised when Norgesic is administered to patients with renal disorders. It should also be used with caution in patients with tachycardia.

Adverse Reactions: Side effects of Norgesic are those seen with APC or those usually associated with mild anticholinergic agents. These may include tachycardia, palpitation, urinary hesitancy or retention, dry mouth, blurred vision, dilatation of the pupil, increased intraocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, and rarely, urticaria and other dermatoses. Infrequently an elderly patient may experience some degree of confusion. Mild central excitation and occasional hallucinations may be observed. These mild side effects can usually be eliminated by reduction in dosage. One case of aplastic anemia associated with the use of Norgesic has been reported. No causal relationship has been established.

Dosage and Administration: Adults—1 to 2 tablets 3 to 4 times daily.

Riker Laboratories, Inc.
NORTHRIDGE, CALIFORNIA 91324
A SUBSIDIARY OF 3M COMPANY

Norgesic...the versatile analgesic
provides effective analgesia and relief
of associated muscle spasm

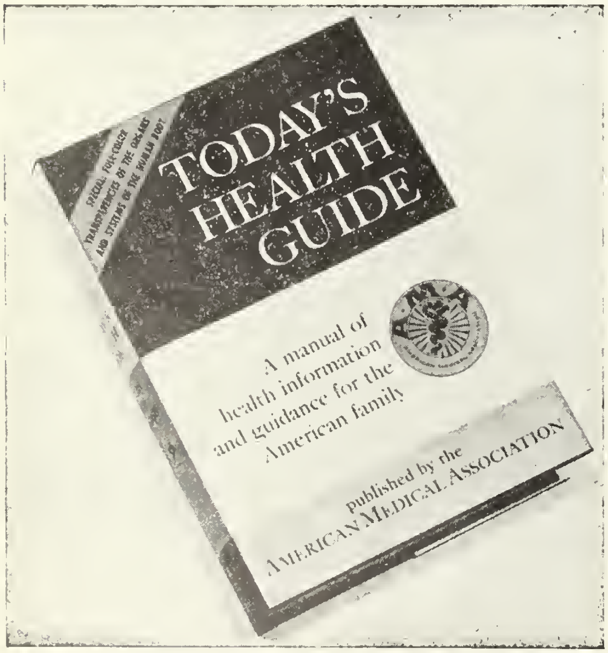
martyrdom commonly leads to suffering and death, no matter how meritorious the cause may have been. The distinction between commitment and martyrdom is faint and elusive. All too many people define "commitment" as agreement with their personal views.

Do you want *me* to risk leading the Society to the headsman's block by following the road of social activism to whatever destination or calamity lies at its end, or to consider, at least, leaving politics to the politicians, social welfare to the sociologists, economics to the economists, and endeavoring to concern the Society with the art and science of medicine? Certainly we are dedicated to delivery of health care on the highest standard.

The members of this Society come from different segments of the State's population, different political parties, different economic backgrounds. As individuals, they are free to promote any political, social and economic views which they may entertain. But should the Society become a forum for their debate, as I fear may be the trend? The question is not whether the Society should be part of the community—of course it should, and it should serve that community as best it can. But should it attempt to act beyond the limits of its Constitution and By-laws, or to concern itself with phases of community life not directly related to the art and science of medicine?

To avoid disregard of my original admonition that there are no easy answers to the problems of the day, let me merely express doubt and say "I don't know."

I'm no angel, but if I'm to represent all members of the Society, as I want to do, there are areas into which I should fear to tread. I intend to proceed with caution, and, with your support, I hope that I can prevent the problems of the Profession and of the Society from becoming worse during my incumbency. That's about as much as any reasonable man can expect from one who has witnessed what has happened over the past few decades.


SPECIAL FULL-COLOR TRANSPARENCIES OF THE ORGANS AND SYSTEMS OF THE HUMAN BODY
TODAY'S HEALTH GUIDE
A manual of health information and guidance for the American family
published by the AMERICAN MEDICAL ASSOCIATION
A·M·A

FOR YOUR PATIENTS:

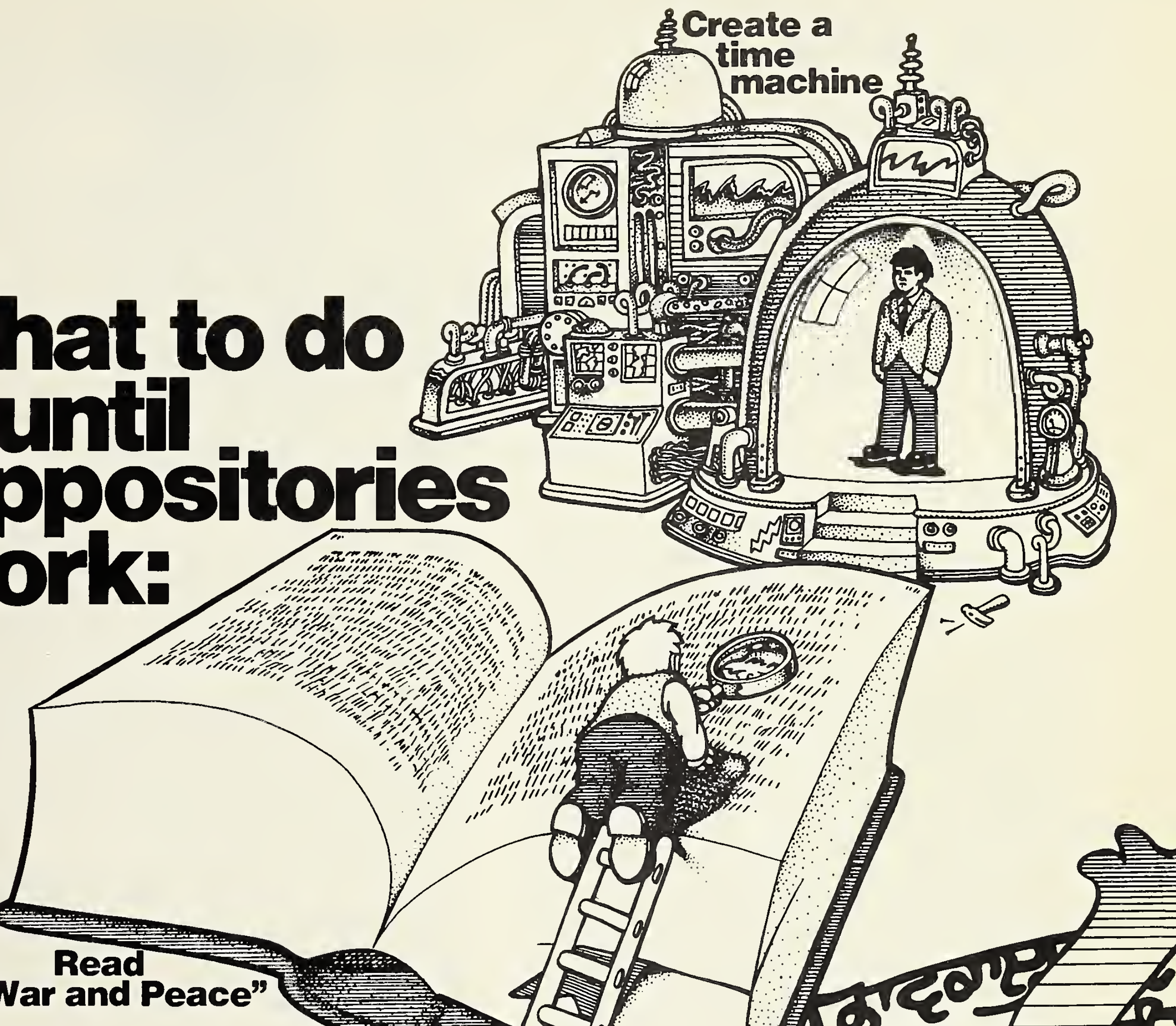
Today's Health Guide is an up-to-date, 646-page, family health reference that should be in every home. The AMA's long awaited new book, Today's Health Guide, is the product of 200 of the world's most renowned authorities in medicine, science and allied fields.

The Guide discusses more than 2,000 illnesses, diseases and other medical subjects including diet and nutrition, child care, safety and first aid, sex education, mental health and when to seek professional medical attention. Over 300 striking illustrations and an eight-page full-color transparency of the human body vividly complement the text.

Today's Health Guide is the medical profession's answer to the need for an inexpensive yet authoritative and comprehensive home health guide.

Your patients may obtain one by sending a check or money order for $5.00 for each copy to the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

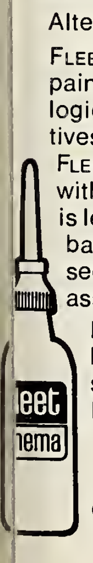
What to do until suppositories work:



Actually, on the average, evacuant suppositories take about an hour to work.[1-3] Sometimes two.[4] Sometimes more.[3] Also, suppositories can be ineffective in up to 38% of patients,[5] and not infrequently produce smarting, burning and tenesmus.[6]

Alternative to the long unpleasant wait: FLEET® ENEMA.

FLEET ENEMA works within 2 to 5 minutes without pain or spasm. FLEET ENEMA induces a physiological pattern of evacuation, unlike purgatives and laxatives that may liquefy the stool. FLEET ENEMA avoids the irritation common with soapsuds enema. And FLEET ENEMA is leakproof: a rubber diaphragm at the base of the prelubricated tube prevents seepage and controls the rate of flow, assuring comfortable administration.



FLEET ENEMA. Regular and pediatric. Both completely disposable—like suppositories, only better. Much better.

Fleet
pharmaceuticals

C. B. FLEET CO., INC.
Lynchburg, Va. 24505

Warning: Frequent or prolonged use of enemas may result in dependence. Take only when needed or when prescribed by a physician. Do not use when nausea, vomiting or abdominal pain is present. **Caution:** Do not administer to children under two years of age unless directed by a physician.

References: 1. Blumberg, N.: Med Times 91:45, Jan., 1963. 2. Sweeney, W. J., III: Amer J Obstet Gynec 85:908, Apr. 1, 1963. 3. Weinsaft, P.: J Amer Geriat Soc 12:295, Mar., 1964. 4. Baydoun, A. B.: Amer J Obstet Gynec 85:905, Apr. 1, 1963. 5. Feder, I. A., Flores, A. and Weiss, J.: Amer J Gastroent 33:366, Mar., 1960. 6. Smith, J. J. and Schwartz, E. D.: Western J Surg 72:177, May-June, 1964.

F19A71

MAILBAG

Detroit anesthesiologists challenge statements of halothane article

To the Editor:

We believe that some comments are warranted on the paper "Halothane Methoxyflurane and Hepatic Necrosis" appearing in your September issue.[1]

1. Dr. McDonald and his colleagues quote the incidence of fulminating hepatic failure following Halothane administration of "one per 5,000 to 1 per 15,000 per random Halothane anesthesia with one per 10,000 being the most acceptable figure." They give as references—The National Halothane Study[2] and the papers by Dr. Slater, et al.,[3] and Professor Mushin, et al.[4] In the National Halothane Study the figure quoted was 1 per 10,000 (82 in 856,500 administrations of anesthesia) for *ALL* anesthetic agents. When data was sifted 73 of these 82 cases of massive hepatic necrosis were attributed to causes other than anesthesia, a change which alters this incidence by a factor of 10. No incidence for Halothane per se is given. Dr. Slater, et al., give a tentative estimate of 1 hepatic necrosis associated with clinical evidence of hepatic dysfunction per 14,685 Halothane administrations, not massive hepatic necrosis, of which they found but one case. They further noted that amongst other general anesthetic agents the incidence of hepatic necrosis with clinical evidence of hepatic dysfunction was 1 per 32,238.

Professor Mushin, et al., state "there is no evidence in our series that any effect which Halothane, in an anesthetic mixture, has on liver is any different from that of the anesthetic mixture without Halothane, or indeed from that of 'others.' " They found no incidence of massive hapatic necrosis.

We find no basis for the incidence mentioned from the references quoted.

2. Dr. McDonald quotes Trey and his colleagues[5,6] to assert that Halothane ranks second to a virus as a possible etiologic cause for fulminant hepatic necrosis; but fails to note that these authors specifically remark that the relative risks of this and other anesthetic agents cannot be determined from a study of a single fatal complication. Again there is no indication in either of Trey's papers of the population at risk from which the sample is drawn.

3. Case 2 in Dr. McDonald's paper is stated to have had no complication during or following anesthesia. One of the classical signs of "Halothane hepatitis" is said to be a low grade fever for several days following anesthesia. The authors state later that viral hepatitis cannot be distinguished from Halothane hepatitis save by rather specialized electron microscopy. Yet the diagnosis is made without either of these criteria being satisfied. If we are to accept Dr. Trey's figures it would seem more probable that this patient had viral hepatitis. At all events it is not proven due to Methoxyflurane from the data presented.

Many drugs used in therapy have been loosely called hepatotoxic. Very few fit Klatskin's[7] classical description of true hepatotoxins. Halothane is not such a drug. Nor are Tetracycline, chloramphenicol, the phenothiazines and many other commonly prescribed medicaments. Where a patient has a genuine adverse reaction to any drug, including Halothane, he should be so informed. But where no adverse reaction occurs information regarding "might have been" can only confuse. We are all aware of "informed consent" but have to apply this edict with common sense.

The National Halothane Study, Slater, et al., and Mushin, et al., all infer that massive hepatic necrosis has followed the administration of most anesthetic agents at some time or another. It is known that all inhalation anesthetic agents are associated with some degree of hepatic dysfunction,[8] as indeed are the common barbiturate induction agents.[9]

The perfect anesthetic has yet to be discovered. Perusal of the current anesthetic and pharmacological literature shows that presently much research is under way. We have already in our hands a large variety of agents but each of them has its limitations.

It is safe to say that no inhalational agent has been brought into practice with more favorable theoretical properties, animal testing, and clinical trial than Halothane. Experiments in animals and trials in man, with the usual conglomeration of liver function tests, seem to bear out that Halothane produces no greater alterations than ether or cyclopropane and a great deal less than chloroform.[10] It is a wonderfully safe anesthetic agent with a wide range of use. Its safety in so many areas, in our opinion, far outweighs the slight, though admitted, risk of hepatic damage. Certainly anesthesiologists should consider the risk and

(Continued on Page 1032)

On formulary and in the pharmacy...

NDC-15-3503-20
KANTREX®
KANAMYCIN SULFATE
INJECTION
EQUIVALENT TO
1.0 Gm.
KANAMYCIN/3 ml.
Caution: Federal law prohibits dispensing without prescription.
BRISTOL

take advantage of the

Kantrex®
KANAMYCIN SULFATE

experience

A dozen years of Kantrex usage have established its efficacy, its versatility, its simplicity.

And its economy.

Faced with a life-threatening infection, the physician cannot conscionably consider economy a primary factor in selection of an appropriate antibiotic. However, when susceptibility reports are in, the infecting pathogens are often found to be susceptible to several antibiotics. The physician may then consider dose requirements and cost in his prescribing decision.

Kantrex requires one simple standardized dose for almost any patient with any susceptible mixed Gram-negative/staph infection (Pseudomonas are resistant). The usual adult daily dose of Kantrex is only 1.0 Gm....and the usual total course of therapy, 7-10 Gm. Translated to dollars and cents, the daily cost of Kantrex therapy may be only 1/2 to 1/8 that of therapy with other parenteral antibiotics used for serious hospital infections.

Doesn't it make good sense to use Kantrex?

Experience proves it does.

RIEF SUMMARY OF PRESCRIBING INFORMATION
) 7/27/71
or complete information, consult Official Package Circular.

Warning: The major toxic effect of parenterally administered kanamycin sulfate is its action on the auditory portion of the eighth nerve. High frequency deafness usually occurs first and can be detected by audiometric testing. Tinnitus or vertigo may occur and are evidence of vestibular injury and impending bilateral, irreversible deafness. In such cases, decrease size and frequency of doses. Discontinue kanamycin and check hearing if azotemia increases. Watch carefully for ototoxicity. in older patients and patients receiving more than 15 Gm. of kanamycin. To avoid neuromuscular paralysis with respiratory depression, postpone intraperitoneal instillation in postoperative patients until recovery from anesthesia and muscle relaxants is complete. Avoid concurrent use of other ototoxic drugs including ethacrynic acid and furosemide. Safety in pregnancy is not established.

dications: Serious infections due to susceptible strains of *E. coli*, Proteus ., *Enterobacter aerogenes*, *K. pneumoniae*, *Serratia marcescens* and *ima-Herellea* Culture and sensitivity studies should be performed.
ontraindications: A history of hypersensitivity to the drug. Prior auditory amage by kanamycin or other agents may be a contraindication if effective, ternative therapy is available.

Precautions: Obtain audiograms before and during therapy in patients with renal dysfunction when treatment lasts more than 5 days. Stop Kantrex if tinnitus or hearing loss occurs. Hydrate patients to prevent chemical irritation of the renal tubules. Assess renal function periodically, both before and during therapy. If signs of renal irritation occur (casts, cells, proteinuria) increase hydration and reduce the dosage or the frequency of dosage if necessary. In azotemic patients, the frequency (in hours) of doses may be obtained by multiplying the serum creatinine by 9. If azotemia or oliguria occur, discontinue therapy. Mycotic or bacterial superinfection may occur.
Adverse Reactions: Irritation or pain at the injection site, skin rash, drug fever, headache and paresthesias.
Dosage and Administration: The usual dose is 7.5 mg./Kg./12 hours I.M. The average dose is 1 Gm. daily for adults and children. The maximum total daily adult dose should not exceed 1.5 Gm. by all routes of administration. Uncomplicated infections due to sensitive organisms should respond in 24 to 48 hours. If no response occurs in 3 to 5 days, stop therapy and recheck the bacterial sensitivities. Hydrate patients well to minimize renal irritation. Inject deeply into the upper outer quadrant of the gluteal muscle. Discard partially used vials after 48 hours. The drug should not be physically mixed with other antimicrobials.
Supplied: Rubber capped vials as a ready-to-use sterile aqueous solution in two concentrations; 0.5 Gm. in 2 ml. 1.0 Gm. in 3 ml. Also available—Pediatric Injection 75 mg. in 2 ml. **A.H.F.S. Category 8:12.28**

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

weigh the pros and cons in any particular situation, but we agree with Artusio[11] who states that "Although we all realize that liver cell irritation may occur following all anesthetic agents, the likelihood of it occurring is indeed remote. The value of Halothane as an effective, non-explosive, non-flammable, general anesthetic has been established. Its universal acceptance by the entire anesthesia world leads me to advocate its continued use."

While we are naturally concerned about the agents we use and wish to be informed in the published literature of any toxic or other properties discovered, we believe uncritical papers such as Dr. McDonald, et al., do a disservice to patients as well as to the medical community. They exaggerate the risks involved out of all proportion to the facts. And, whilst being unacquainted with the risks and dangers involved in day to day anesthetic practice, aspire to make suggestions to their kindred specialists on how to run their practice and choose their drugs. By so doing, they encourage others to follow their example.

Respectfully,
T. David Seigne, MD
Henry J. Zukowski, MD
A. Michael Prus, MD
Elmer J. Seim, MD
Peter A. DelGiudice, MD
Thomas S. Morley, MD

References

1. McDonald, J.M., Nam, S.H., and Climie, A.R.W., "Halothane, Methoxyflurane and Hepatic Necrosis." Michigan Medicine, Volume 70, Number 22, 815-820, September, 1971.
2. Subcommittee on the National Halothane Study of the Committee on Anesthesia, National Academy of Science-National Research Council: "Summary of the National Halothane Study. Possible Association between Halothane Anesthesia and Postoperative Hepatic Necrosis." JAMA, 197:775-788, 1966.
3. Slater, E.M., Gibson, J.M., Dykes, M.H.M., et al.: "Postoperative Hepatic Necrosis—Its Incidence and Diagnostic Value in Association with the Administration of Halothane." New Eng. J. Med., 270: 983-987, 1964.
4. Mushin, W.W., Rosen, M., Bowen, D.J., et al.: "Halothane and Liver Dysfunction: A Retrospective Study." Brit. Med. J. 2 329-341, 1964.
5. Trey, C., Lipworth, L., Chalmers, T.C., et al.: "Fulminant Hepatic Failure—Presumable Contribution of Halothane." New Eng. J. Med., 279:798-801, 1968.
6. Trey, C., Lipworth, L., Davidson, C.S.: "The Clinical Syndrome of Halothane Hepatitis." Anesth. Analg., 48:1033-1042, 1969.
7. Klatskin, G., Symposium on Toxic Hepatitis, Gastroenterology *38* 789 1960.
8. Little, D.M., Welstone, J.H.: "Anesthesia and the Liver." Anesthesiology 25:815-853, 1964.
9. Bittrich, N.M., Kane, A.V'R., Mosher, R.E.: "Methohexital and Its Effects on Liver Function." Anesthesiology *24* 81-90 1963.
10. VanDam, L.D., 'Halothane and Hepatic Necrosis." Editorial. Anesthesiology *24* 109-110 1963.
11. Artusio, J.F., Jr., Guest Discussion Following "The Clinical Syndrome of Halothane Hepatitis." Trey, C., Lipworth, L., Davidson, C.S. Anesthesia and Analgesia Current Researches. *48* No. 6 1033-1042 1969.

Chronic exposure to gases may pose hazard to anesthesiologists

Editor's Note: As debate grew about the use of halothane following an article in the September issue of MICHIGAN MEDICINE, this news item arrived at MSMS headquarters:

Concerned about the reported incidence of certain kinds of cancer among anesthesiologists as well as spontaneous abortions among pregnant nurse anesthetists, two University of Michigan scientists believe they may have found the reasons in polluted operating room air. The U-M studies implicate commonly used anesthetic gases.

The researchers are Thomas H. Corbett, MD, anesthesiology instructor at the U-M Medical Center, and Gwendolyn L. Ball, research associate in the U-M School of Public Health.

Their studies indicate that inhaling and exhaling anesthetic gases such as halothane, methoxyflurane and nitrous oxide over a period of time produce change in the breather's metabolism. According to Corbett, those continually and daily exposed could have residual levels of the gases stored in their bodies for months, even years.

"We believe," he said, "that there is now suggestive evidence that chronic exposure to anesthetic gases constitutes an occupational hazard to anesthesiologists and other operating room personnel."

Your opinion please

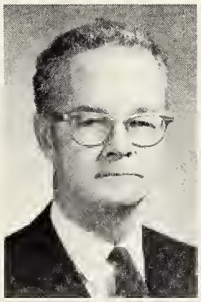
"Current discussion of possible improvements in health care delivery in the United States includes the concept of prepayment under a group care situation as one feasible solution. What sorts of problems, if any, do you think would occur under this system with regard to the physician-patient relationship? What do you see as the weaknesses — as the strengths?"

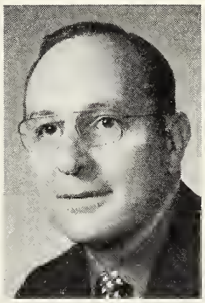
Clark B. Smith, MD, Hillsdale

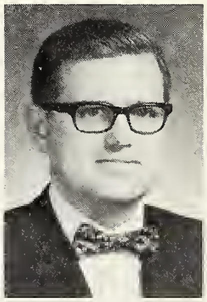
It is unnecessary to speculate about the weaknesses and strengths of the prepaid group plans. There is a voluminous literature detailing the problems and advantages based upon years of experience with major groups. The frightening thing to me is that we are hearing apparently responsible, respectable, perhaps now even knowledgeable people debating which single system is best, whether it be a group, prepaid, postpaid, or unpaid. Since all organizational systems for the delivery of medical care have been found wanting in one way or another, and since the delivery of medical care is a real 'gut issue,' social planners, politicians, labor and business leaders (all of whose motives are open to question) have found public acclaim, personal gain, and a choleretic catharsis from attacking the present multi-system approach in this country. The same individuals then promise (having had the benefit of absolutely no experience in providing medical care under any circumstances) to provide improved, less expensive medical care if only we will grant them control over the distribution and financing of the care. One group of "cheap-shot" artists at CBS spent two hours of prime television time totally distorting the merits and deficiencies of the multi-system approach used in this country.

What most of the politicians, the social planners, the labor leaders (whether self-serving or sincere) simply cannot or will not understand is that the temperament, the character, the aggressiveness, the tenacity, the individuality which had made one struggle through 22 to 25 or more years of formal schooling and postgraduate training before beginning to practice, is found only in individuals who will not be bound, gagged, coerced, cowed and manipulated by a bureaucracy. It really does not matter what form of practice or system of medicine is imposed upon physicians. If there is no freedom of choice for the physician and the patient within that system, it will be unsuccessful. The importance is freedom of choice.

Provision must be made for solo private practice and for salaried university practice, for group fee for service and for government supported systems as desired by both the patient and the physician. The promotion of one over the others, whether by discriminatory payment practices either by government or fiscal intermediaries, or by legislative support or disapproval, will ultimately hurt the quality of medical care and lead to a change in the character of the physicians. The aggressive, innovative, interested, humane individuals will find other areas of interest than medicine and will be replaced in medical schools and practice by paper-shuffling, pliable bureaucrats who have adapted to the system. Superb technicians they may be, but physicians they are not. It takes a certain temperament to be as strongly motivated and dedicated to continuing education and improvement in skills as are physicians, and at the


Dr. Vining


Dr. Hamburger


Dr. Williams

same time be willing to interrupt any activity, day or night, to attend to the needs of others. I do not consider that temperament incompatible with any voluntary elected form of practice, but I seriously doubt its ability to survive, much less thrive, in any system which deprives it of its free choice.

Keats K. Vining, Jr., MD, Grand Rapids

In the first place, there is not a new and different program for delivery of health care that will automatically expand the availability of current health manpower to deliver it. I can see or conceive very easily that the prepayment concept under a group care situation would probably worsen the available manpower situation by virtue of inviting excessive use of current facilities and personnel by those who had already prepaid.

The physician-patient relationship is probably the strongest where the patient is paying for said relationship on a demand basis. The attitude of the patient, and his motivation to accept advice, is a much overlooked factor in the failure or success of medical care. Totally prepaid care, whether by the patient or, as is more likely, by an employer through a third party intermediary, detracts from the value of the care rendered in the eyes of the recipient patient, and thus reduces his motivation to follow direction.

I do not think that this type of care will improve our current health care delivery and probably will ultimately weaken it for the above-stated reasons.

Joel I. Hamburger, MD, East Lansing

Over the years the concept of the doctor-patient relationship has become invested with emotional overtones to the point where it has achieved a degree of sanctity akin to that associated with "motherhood" or "the flag." One recalls with nostalgia the image of the family doctor of yesteryear at the bedside, holding his patient's hand, offering him reassurance and hope. In this frame of reference the doctor was actually a combination father, minister, and friend of the family—a truly noble figure. However, lest judgment be clouded by nostalgia, it is important to realize that the doctor-patient relationship is not the primary product of the physician's service; rather it is one of an increasing number of tools employed in the delivery of the product. The mission of the physician is the preservation and/or restoration of the health of his patient. The degree to which a doctor-patient relationship must be developed may in fact be viewed as inversely related to the ability

(Continued on Page 1036)

Pre-Sate® **(chlorphentermine hydrochloride)**

Caution: Federal law prohibits dispensing without prescription.

Indications
Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e. several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications
Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monamine oxidase inhibitors, since hypertensive crises may result.

Warnings
When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexigenic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.
Drug Dependence Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with the high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.
Usage In Pregnancy The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.
Usage In Children Not recommended for use in children under 12 years of age.

Precautions
In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

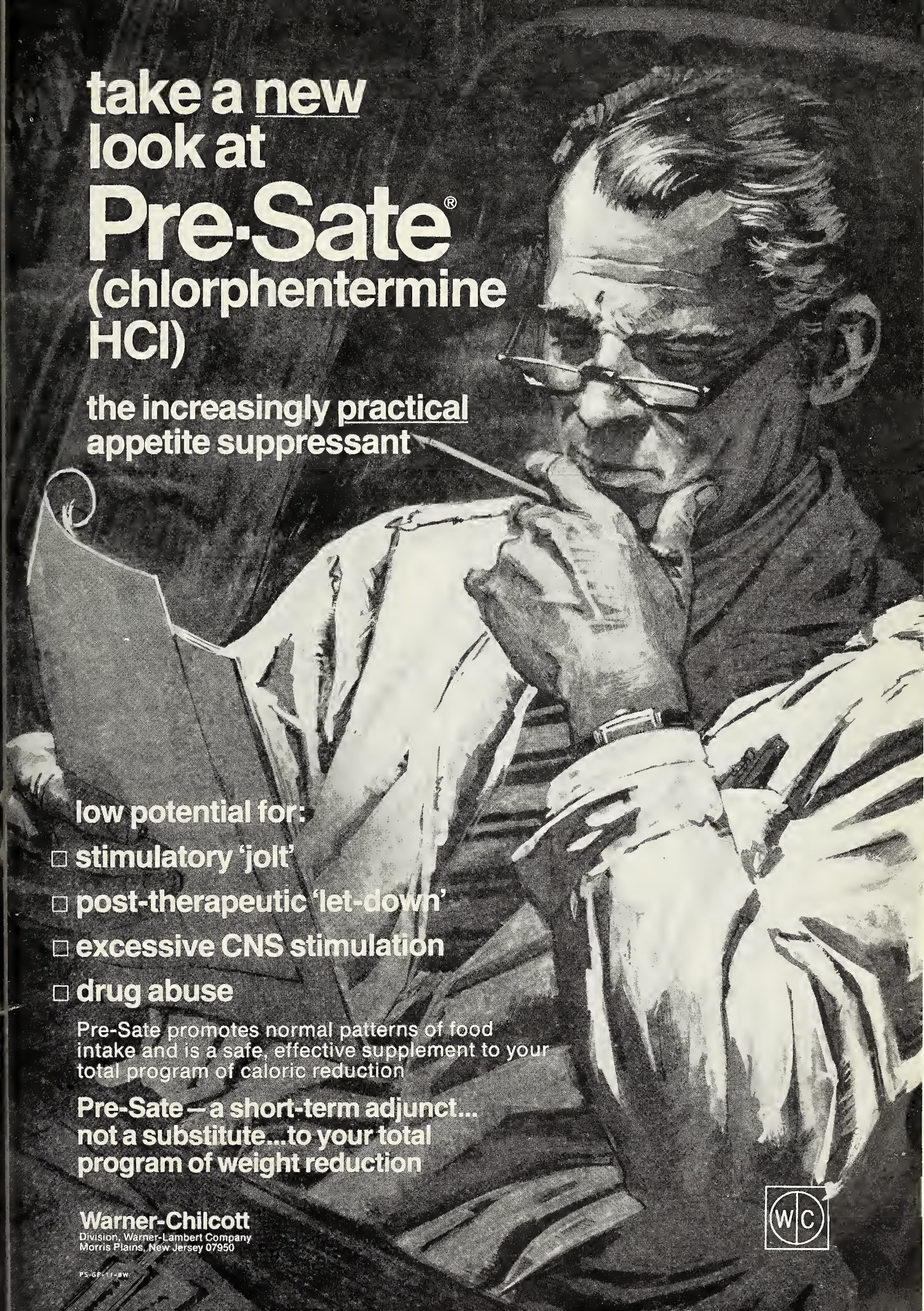
Adverse Reactions
Central Nervous System: When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration
The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage
Manifestations: Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.
Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied
Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full information is available on request.



take a new look at **Pre-Sate®** (chlorphentermine HCl)

the increasingly practical appetite suppressant

low potential for:

☐ stimulatory 'jolt'
☐ post-therapeutic 'let-down'
☐ excessive CNS stimulation
☐ drug abuse

Pre-Sate promotes normal patterns of food intake and is a safe, effective supplement to your total program of caloric reduction

Pre-Sate – a short-term adjunct... not a substitute...to your total program of weight reduction

Warner-Chilcott
Division, Warner-Lambert Company
Morris Plains, New Jersey 07950

PS-GP-11-BW

of the physician to accomplish his primary mission effectively and efficiently. Two extreme situations will exemplify this point. The clinical pathologist may serve effectively with virtually no patient contact, yet the current practice of psychiatry is inconceivable without an intense and prolonged doctor-patient relationship. However, the necessity for this special relationship between psychiatrist and patient is a direct consequence of the lack of any effective and simpler alternative. Newer medications have to some degree lessened the psychiatric patient's dependence upon the physician. Should future research uncover the precise nature of the pathophysiologic disorder in mental disease, and provide a simple treatment remedy, the doctor-patient relationship would be drastically reduced. At the same time, the effectiveness of the psychiatrist would be vastly improved, since he would be able to care for many hundreds of patients, rather than just a handful. Thus, as effectiveness and efficiency increase, inevitably the depth and breadth of the doctor-patient relationship is diminished.

Although this might appear to be a flight into fancy, this is precisely what has happened in the practice of medicine in the recent past. Scientific and technological advances have permitted far more precise and effective diagnosis and management for the majority of illnesses to which mankind is heir. The physician no longer spends most of his time attempting to comfort his patients, as their diseases, unimpressed by empty words, run their inexorable downhill courses. The job of providing whatever comfort possible to the incurable patient has been properly delegated to friends, relatives, and clergymen. Meanwhile the physician can devote his energies to keeping abreast of modern diagnostic and therapeutic advances, and applying these methods to an ever-increasing number of patients who will benefit thereby.

This is not to say that there is no longer a need for a doctor-patient relationship beyond that of a client-clerk relationship. It is still necessary for the physician to gain the patient's confidence if there is to be cooperation with the prescribed program. However, confidence can be the result of factors more or less remote from the individual practitioner. Patients flock to certain famous clinics without any regard for the individual physicians who may serve them. The patient then relates to the institution. A similar phenomenon is developing on a smaller scale in many group practices. The patient is the patient of the group. No single physician necessarily renders his care consistently. Physicians may come and go, but the group remains, and engenders confidence on the basis of its overall performance. Although group practice need not prove more effective, it would seem to provide for improved efficiency.

Thus it would appear that as the ability to provide more effective and efficient medical care increases, there is a corresponding diminution in the depth and breadth of the doctor-patient relationship. Although this conclusion may seem justifiable from the point of view of the provider of medical care, it may be quite unsatisfactory to the recipient. In fact it is the failure adequately to appreciate the needs and expectations of patients in terms of the doctor-patient relationship that leads to much of the existing dissatisfaction with medical care in the country. Every physician has experienced a patient whom he considers excellently served from the health standpoint, but who is unhappy because of the impersonal manner with which the care was dispensed. A prime example of this discontent is the oft repeated complaint that: "My doctor won't make emergency house calls." This attitude persists in spite of the fact that the house call is largely an archaic practice which virtually guarantees the truly sick individual inadequate attention by denying him the benefits of modern technology available in the hospital or clinic. Although the virtual elimination of emergency house calls has probably improved, rather than impaired, the delivery of health care, the public feels ill-served because this change represents a depersonalization of its medical attention. At this point it should be noted that depersonalization does not preclude conduct in a friendly and courteous fashion. It is simply a recognition of the impossibility of being a close personal friend to the larger number of patients that can and must be served. Nevertheless, it is the growing disparity between what is required and best for the patient, and what the patient thinks he requires, or might like to have, that is the basis for the deteriorating attitude of the public toward the medical profession.

As the trend to depersonalization of medical care is inherent, not only in all proposals for future systems of health care delivery, but also in any realistic appraisal of the logistics of medical care, and since the preservation or resurrection of the traditional doctor-patient relationship and the provision of the best care possible to an ever-increasing number of patients are mutually exclusive objectives, it is incumbent upon the medical profession to embark upon a major educational effort to promote public appreciation of the benefits of technical and scientific advances and an understanding of the necessity for changes in traditional patterns of care which the effective implementation of these advances necessitate.

Dale L. Williams, MD, Muskegon

The high cost of medical care has become a

(Continued on Page 1038)

DON'T BELIEVE IT...

If somebody trys to tell you the MSMS Disability Plan is not guaranteed renewable.

Some agents are more interested in their own gain than they are in properly advising you on disability insurance protection.

There is no better group accident and sickness policy than that sponsored by YOUR STATE SOCIETY.

CALL COLLECT FOR DETAILS

bps **BEN P. STRATTON AGENCY, INC.**
ESTABLISHED IN 1937

MAIN OFFICE
5848 EXECUTIVE DRIVE
LANSING, MICHIGAN 48910
(517) 393-7660

BRANCH OFFICE
19400 WEST TEN MILE ROAD
SOUTHFIELD, MICHIGAN 48075
357-5083

favorite topic among the news media. The political response has been an avalanche of medical schemes. One such idea is prepaid health care by a medical group.

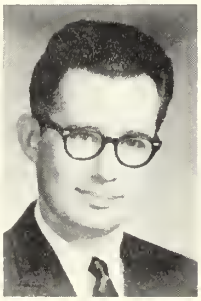
The attraction of such a plan is obvious. The patient would be sure of complete medical care. His care could be more complete and at an assured premium.

The greatest advantage, however, would be to the physician. He now has almost complete control over medical costs and would profit by any reductions. As physicians, we know that the ability to hold down medical costs rests with us and we have not given this the priority that it should have. The battery of tests, the prophylactic x-ray and other procedures are still used to save time and/or as a legal pacifier.

The physician under the prepaid plan would be financially rewarded if he reduced costs. Probably the area where reductions would be most spectacular is in the hospital. Minor surgical procedures such as D & C and tonsillectomies might be done as outpatient procedures. Many patients could be sent home one or two days earlier. Medical conditions such as pneumonia and cardiac recuperation could be treated at home. It would be less expensive to provide nurse specialists to visit the patient at home twice a day than to continue hospitalization.

In order for the program to succeed, however, it must be in cooperation with someone we can trust—the private insurance sector. Government agencies have a long record of broken promises and cannot be trusted. Their policies and promises are influenced by the politics of the moment rather than financial integrity.

While other problems, such as under-utilization, must be resolved, I feel that prepaid health care is the most positive step that the medical profession can take.



Dr. Blair

Larry L. Blair, MD,
Hastings

At the present time we have prepayment of medical care in the form of health insurance in which one party gambles that he will have to participate in the program and the other party is gambling that the individual will not have to participate. An alternative to this system is prepayment to a specific health care delivery system. If a program such as the latter were forced upon us tomorrow without a great deal of forethought and planning I believe that we would be inundated. I do not foresee how we can participate in such a comprehensive health delivery system without more allied personnel in the health fields and without delegating more responsibility to paramedical personnel who are licensed to handle such responsibility. Such a program would involve health screening and more prophylactic medicine than is practiced under our present system.

It would also establish levels of entry into such a program as the well-known criteria of "well, well-sick, and the sick." To do this, one would have to embark upon an educational program involving the community which is going to participate in such a program, as well as the allied health personnel and the physicians. If this were done with the proper educational techniques I do not believe that it would interfere with the physician-patient relationship at all and could possibly strengthen the medical community's liaison with the community at large. I do believe that one of the weaknesses of the system would be increased demand by the public on the medical community, thereby requiring the increased use of the paramedical personnel. At the present time we do not have sufficient numbers of adequately trained paramedical personnel, and I therefore do not think that such a program is feasible until such personnel are forthcoming. I do not think that this is at all feasible without specification of medico-legal implications or until the medical communities at large are allowed to participate in the educational programs of such paramedical and allied health personnel.

In summary, I believe that in the near future we will be participating in such health delivery systems but I would hope that before this arrives we will have engaged in a new process of education, involving the community at large as well as the medical community.

I look forward to the challenges which such a system might bring.

USPHS urges study of ways to end smallpox vaccination

The U.S. Public Health Service is advising state medical personnel to consider an end to compulsory and routine smallpox vaccines. This is at the recommendation of the USPHS Advisory Committee on Immunization Practices, which encourages public health and medical groups to promptly explore ways to foster broad understanding and implementation of the recommendation.

Here is the full text of the Advisory Committee's recommendation:

"The Committee has reviewed the success achieved so far by the World Health Organization (WHO)-sponsored smallpox eradication effort and fully expects that it will continue. It now believes that the risk of smallpox in the United States is so small that the practice of routine smallpox vaccination is no longer indicated in this country.

"The Committee believes that public health efforts should be devoted to assuring adequate immunization of all personnel involved in health services and of all travelers to and from continents where smallpox has not been eradicated.

"Because of the rapidly declining incidence of smallpox in the world and the vastly reduced risk of its being imported into the United States, health officials in the United States should consider the discontinuation of compulsory measures as they relate to routine smallpox vaccination.

"The Public Health Service should regularly evaluate and distribute information on the progress toward worldwide smallpox eradication. This will provide a basis for future assessment of smallpox vaccination practices in the United States.

"Finally, physicians and public health agencies should intensify efforts to assure that all adverse vaccine reactions are reported and that the following contraindications to smallpox vaccination are scrupulously observed: (1) eczema and other forms of chronic dermatitis in the person to be vaccinated or in a household contact; (2) pregnancy; (3) altered immune states from disease or therapy."

Project 75 can now be launched with Kellogg grant

"Project 75," the Michigan Health Council plan to increase Michigan health personnel to 75,000 by 1975, is a step closer to reality with a grant from the Kellogg Foundation. The $102,500 gift will make possible the launching of "Project 75."

The U.S. Bureau of Health Manpower recently predicted 283,000 openings annually during the 1970's for health personnel and observed that the number of health personnel will probably have to be doubled by 1980.

SOME PHYSICIANS KNOW what to do with their patients who are alcoholics or problem drinkers.

SOME PHYSICIANS WISH they knew what to do with them.

Have you thought of the Alcoholism Services of the Battle Creek Sanitarium Hospital? Since 1965 we have maintained an enviable record in the rehabilitation of the alcoholic or problem drinker.

A full range of services and specialties.

Give us a call
616-964-7121 Ext. 588 or 589

Battle Creek Sanitarium and Hospital
197 N. Washington Avenue
Battle Creek, Michigan 49016

HOSPITAL-MEDICAL PLANNING, INC.
Alco Universal Building
East Lansing, Michigan
48823
517 332-1333

PROFESSIONAL PERSONNEL RECRUITMENT
FOR
HOSPITALS CLINICS UNIVERSITIES
Administrators, Physicians, Dept. Heads

PHYSICIANS—ALL SPECIALTIES

At no financial obligation, send us your resume if you would like a fine full-time position with one of our Clients:

HOSPITALS: Full-time Chiefs of Services, Directors of Medical Education (General and Specialty).

MULTI-SPECIALTY CLINICS: General Practice and all Specialties.

SINGLE-SPECIALTY GROUPS. General Practice and all Specialties.

MEDICAL SCHOOLS: Teaching and Research appointments—all Disciplines.

DRUG FIRMS: Basic Science and Clinical Trials Research

INDUSTRIAL FIRMS: Employee Health Care.

COLLEGES and UNIVERSITIES: Student Health Care.

In addition to our service to Client organizations, we assist physicians in considering relative merits of a variety of fine opportunities. No financial obligation at any time to the candidate. Appointments can be made as much as a year or more in advance. Send complete resume plus your professional objectives and geographic preferences in confidence to Arthur A. Lepinot.

MSMS survey shows physicians' earnings rising slower than costs of practice

By John Anthony
Chief
MSMS Bureau
of Economic Information

Michigan physicians' earnings have failed to keep up proportionately with increases in costs involved in conducting a medical practice.

A research report prepared by the MSMS Medical Socio-Economic Department shows that between 1966 and 1970, average costs of medical practice increased by 39.8 per cent while revenues rose 33.3 per cent.

The greatest increases in costs of practice occurred in taxes and fringe benefits for employees, in salaries of assistants who are not physicians, and in insurance, especially liability.

The MSMS study was developed by the Bureau of Economic Information and a professional consulting firm working under the direction of the society's Committee on Medical Socio-Economics. The report was based on responses to a questionnaire submitted to all MSMS members.

The study found that the proportion of physicians' revenues needed to cover costs rose from 39.3 per cent in 1966 to 41.2 per cent in 1970 while earnings declined from 60.7 per cent of revenues to 58.8 per cent of revenues during the same period.

The following tables and charts more fully explain the results of the recent costs survey.

Exhibit II presents a summary of the percentage increase for 1970 over 1966 for various categories of average cost as well as for average revenue and average earnings. The following observations may be made:

- Costs increased more than either Earnings or Revenue.
- *Payroll Taxes and Fringe Benefits,* and *Insurance* categories of cost experienced the largest increases.
- *Salaries, Payroll Taxes and Fringe Benefits,* and *Insurance* increased by a greater percentage than the total average cost.

The new MSMS Bureau of Economic Information intends to collect up-to-date information on an annual basis.

Exhibit I

Cost Category Detail

1. *Non-Owner Physician Salaries:* Salaries of physician employees who do not own any portion of the practice.
2. *Non-Physician Salaries:* Salaries of employees who are not physicians.
3. *Payroll Taxes and Fringe Benefits:* Cost of F.I.C.A., unemployment taxes, hospitalization, bonuses, pensions and other benefits. (Does not include owner pension).
4. *Drugs, Medical Supplies, and Laboratory Fees.*
5. *Occupancy, Equipment and Office:* Includes rentals, depreciation, property taxes, utilities, telephone, maintenance, office supplies, postage, and laundry.
6. *Insurance:* Professional and general liability, fire and business insurance (does not include life insurance).
7. *Automobile:* Expense of auto lease, depreciation, gas and maintenance.
8. *Other:* Includes donations, conventions, dues, journals, entertainment, legal and accounting fees, and locum tenens.

Exhibit II

Average Costs

	Percent Increase
REVENUE	33.3%
COSTS:	
Non-owner physician salaries	5.1%
Non-physician salaries	40.2
Payroll taxes and fringe benefits	100.8
Drugs, medical supplies and lab	25.5
Occupancy, equipment and office	38.6
Insurance	97.4
Automobile	27.4
Other	34.8
TOTAL	39.8%
EARNINGS	29.2%

(Continued on Page 1045)

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

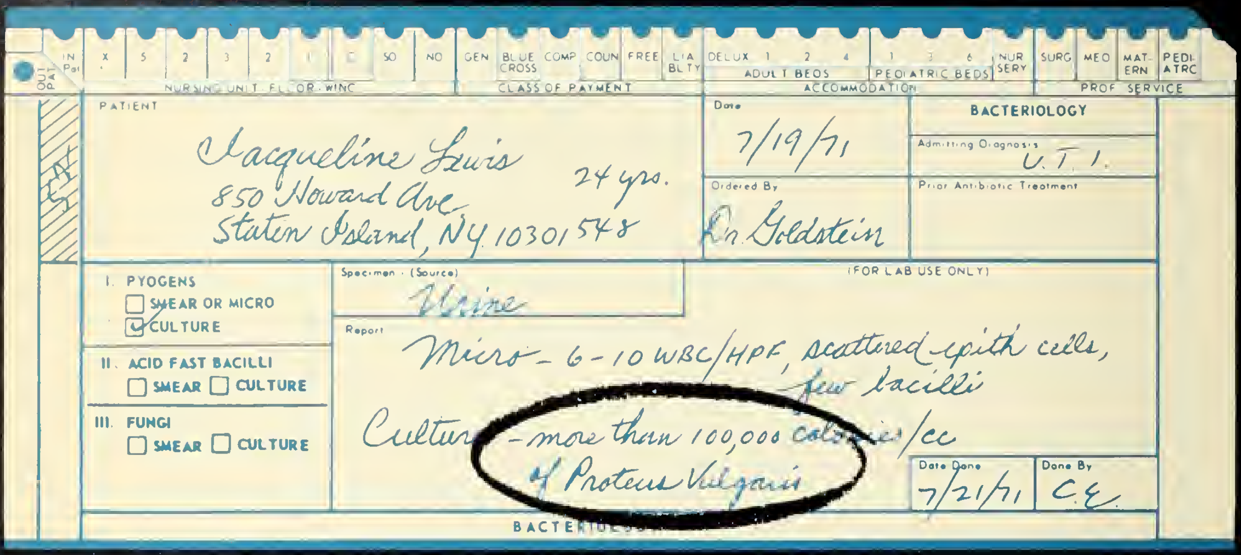
A gratifying announcement about Empirin® Compound with Codeine

CIII

You may now specify up to five refills within six months when you prescribe Empirin Compound with Codeine (unless restricted by state law).

It is significant in this era of increased regulation, that Empirin Compound with Codeine has been placed in a less restrictive category. You may now wish to consider Empirin with Codeine even more frequently for its predictable analgesia in acute or protracted pain of moderate to severe intensity.

Empirin Compound with Codeine No. 3 contains codeine phosphate* (32.4 mg.) gr. ½. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.



OUT PAT | IN Pat | X | 5 | 2 | 3 | 2 | 1 | 0 | SO | NO
NURSING UNIT · FLOOR · WING

GEN | BLUE CROSS | COMP | COUN | FREE | LIA BLTY
CLASS OF PAYMENT

DELUX | 1 | 2 | 4 | ADULT BEDS | 1 | 3 | 6 | PEDIATRIC BEDS | NURSERY
ACCOMMODATION

SURG | MED | MATERN | PEDIATRC
PROF SERVICE

PATIENT
Jacqueline Lewis 24 yrs.
850 Howard Ave
Staten Island, NY 10301 548

Date 7/19/71

BACTERIOLOGY

Admitting Diagnosis U.T.I.

Ordered By Dr. Goldstein

Prior Antibiotic Treatment

I. PYOGENS
☐ SMEAR OR MICRO
☑ CULTURE

II. ACID FAST BACILLI
☐ SMEAR ☐ CULTURE

III. FUNGI
☐ SMEAR ☐ CULTURE

Specimen · (Source) Urine

(FOR LAB USE ONLY)

Report
Micro – 6-10 WBC/HPF, scattered epith cells, few bacilli
Culture – more than 100,000 colonies/cc of Proteus Vulgaris

Date Done 7/21/71

Done By C.E.

BACTERI

the choice is clear:

Pyopen®

(sterile disodium carbenicillin)

A serious urinary tract infection...
Proteus vulgaris, confirmed by pure culture. Fortunately, the strain proves sensitive to carbenicillin and the patient is not allergic to penicillins. The choice is clear: Pyopen.

Unlike other antibiotics currently available for the treatment of Gram-negative sepsis, there are no reports of nephrotoxicity or ototoxicity with Pyopen therapy. Particularly valuable in urinary infections, because of its exceptionally high urine levels, its effectiveness against *Ps. aeruginosa* and *Proteus* species has been amply confirmed by clinical experience and microbiologic studies.

Pyopen is a product of Beecham, the company which pioneered most of today's semi-synthetic penicillins. Your Beecham-Massengill representative would like to give you proof of our dedication to the concept of Total Service.

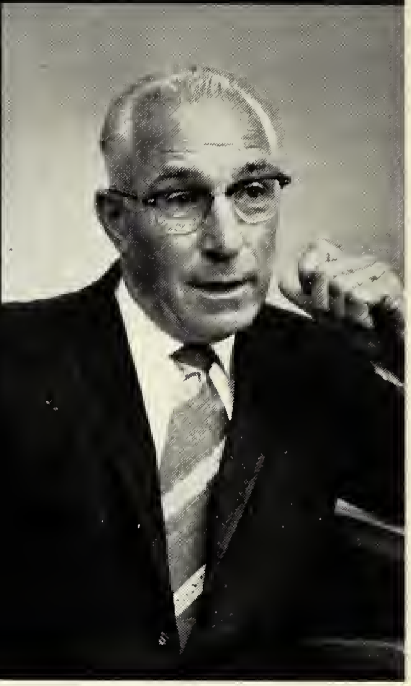
THE TOTAL SERVICE CONCEPT: Beecham-Massengill's dedication to the concept of total service is exemplified by the Pyopen Program — offering valuable teaching-learning materials and an added measure of personal attention: *Gram-Negative Sepsis*, a multimedia presentation by leading American medical authorities...*A Profile of Pseudomonas*, a monograph for the clinical microbiologist... *24-hour consultation service* in matters relating to carbenicillin (phone: 201-778-9000)... *emergency supply*, a novel plan for assuring the continual availability of Pyopen to hospitals specifying this brand of carbenicillin.

For additional information about the Beecham-Massengill Total Service Concept see our representative or write to us directly.

BEECHAM-MASSENGILL PHARMACEUTICALS
Div. of Beecham Inc.
Bristol, Tennessee 37620

PRESCRIBING INFORMATION **Indications:** Primarily for treatment of infections due to susceptible strains of *Pseudomonas aeruginosa*, *Proteus* species (particularly indole-positive strains), and certain *Escherichia coli*. Clinical effectiveness has been demonstrated in the following infections when due to these organisms: Urinary tract infections; severe systemic infections and septicemia; acute and chronic respiratory infections (while clinical improvement has been shown, bacteriologic cures cannot be expected in patients with chronic respiratory disease and cystic fibrosis); soft tissue infections. Although PYOPEN (disodium carbenicillin) is indicated primarily in Gram-negative infections, its activity against Gram-positive organisms should be kept in mind when both Gram-positive and Gram-negative organisms are isolated (see Actions). **Note:** During therapy, sensitivity testing should be repeated frequently to detect the possible emergence of resistant organisms. **Actions:** Organisms found to be susceptible *in vitro* include: Gram-Negative Organisms-*Ps. aeruginosa*, *Proteus mirabilis*, *Pr. morganii*, *Pr. rettgeri*, *Pr. vulgaris*, *E. coli*, *Enterobacter* species, *Salmonella* species, *Hemophilus influenzae*, and *Neisseria* species. Gram-Positive Organisms-*Staphylococcus aureus* (nonpenicillinase-producing), *Staph. albus*, *Diplococcus pneumoniae*, Beta-hemolytic streptococci, and *Streptococcus faecalis*. Some newly emerging pathogenic strains of *Herellea*, *Mima*, *Citrobacter*, and *Serratia* have also shown *in vitro* susceptibility. Not stable in the presence of penicillinase. *Klebsiella* species are resistant. Some strains of *Pseudomonas* have developed resistance fairly rapidly. **Contraindications:** Known penicillin allergy. **Warnings:** Serious and occasional fatal hypersensitivity (anaphylactic) reactions have been reported in patients on penicillin therapy. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens. There have been reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, appropriate therapy should be instituted and discontinuance of disodium carbenicillin therapy considered, unless the infection is life threatening and only amenable to disodium carbenicillin therapy. The usual agents (antihistamines, pressor amines, and corticosteroids) should be readily available. **Usage in Pregnancy:** Safety for use in pregnancy has not been established. **Precautions:** As with any other potent agent, it is advisable to check periodically for organ-system dysfunction, including renal, hepatic, and hematopoietic systems, during prolonged therapy. Emergence of resistant organisms, such as *Klebsiella* species and *Serratia* species, which may cause superinfection, should be kept in mind. Each gram contains 4.7 mEq sodium; in patients where sodium restriction is necessary, such as cardiac patients, periodic electrolyte determinations and monitoring of cardiac status should be made. Observe patients with renal impairment for bleeding manifestations and adhere strictly to dosage recommendations. If bleeding manifestations appear, discontinue antibiotic and institute appropriate therapy. As with any penicillin preparation, the possibility of an allergic response, including anaphylaxis, may occur, particularly in a hypersensitive individual. **Administration:** Intramuscular injections should be made well within the body of a relatively large muscle (not into the lower and mid-third of the upper arm), and aspiration is necessary to help avoid inadvertent injection into a blood vessel. May be given by either intravenous injection or intravenous infusion. After reconstitution with Sterile Water for Injection unused portions should be discarded after 24 hours if stored at room temperature, or after 72 hours if refrigerated. **Adverse Reactions:** *Hypersensitivity Reactions*—Skin rashes, eosinophilia, pruritus, urticaria, drug fever, and anaphylactic reactions. *Gastrointestinal Disturbances*—Nausea. *Hemic and Lymphatic Systems*—Hemolytic anemia, thrombocytopenia, leukopenia, neutropenia, in uremic patients receiving high doses (24 gm/day), hemorrhagic manifestations associated with abnormalities of coagulation tests, such as clotting and prothrombin time. *Hepatic and Renal Studies*—SGOT and SGPT elevations have been observed, particularly in children. To date, no clinical manifestations of renal disorders have been demonstrated. *Central Nervous System*—Convulsions or neuromuscular irritability could occur with excessively high serum levels. *Local Reactions*—Pain at the site of injection, sometimes accompanied by induration. Vein Irritation and Thrombophlebitis—particularly when undiluted solution is injected directly into the vein. **How Supplied:** Available in 1 Gm. and 5 Gm. vials.
Before prescribing or administering, see package circular or PDR.

"Drug research gives me the tools that save lives."



A family doctor looks at new developments in the pharmaceutical industry. And he speculates on the future.

When I look back at some of my old records, I'm constantly reminded of the changes that have come about in medicine just during the past twenty-five years. Some of the diseases I treated and prayed over in the '40's are found mostly in medical history books now.

Thanks to drug research and development, we've made substantial gains in the control of cardiovascular disease, diabetes, malaria, mental illness, strep and staph infections, meningitis and a long list of ailments. It seems like only yesterday when a diagnosis of pneumonia was almost the kiss of death. Now, with modern medical techniques and drug therapy, we can offer some real help.

My records on polio, influenza and measles show an unbelievable trend for the better. New vaccines have reduced the toll of these age-old threats dramatically. And I see patients in pain from crippling arthritis helped with new medicinals unknown just a few years ago.

I hear questions about the three billion or so dollars spent by the drug industry in research during the past ten years . . . working on new and better drug products. It does seem like quite a bit of money to spend, and I realize some of it goes into dead ends. That's the problem with research, any research . . . you often don't know where you're going until you get there. I want all the tools I can get to help my patients. I want more drugs and more effective drugs. If they mean less pain, longer lives and more productive careers for those I treat . . . well, that's what really counts.

Another point of view . . .
Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.

This advertisement has been reaching consumers thru THE ATLANTIC, FAMILY HEALTH, HARPER'S MAGAZINE, NEWSWEEK, SATURDAY REVIEW, TIME and U.S.NEWS & WORLD REPORT.

Exhibit III presents the trends in the relationship of the various cost categories to revenue. The following observations may be made:

- *Non-Owner Physician Salaries* and *Drugs, Medical Supplies and Laboratory* increased as a per cent of revenue.
- *Salaries* continued to be the most significant cost factor when compared to revenue.
- *Automobile* and *Other Costs* related to revenue did not change significantly.

Exhibit III

Costs as a Percent of Revenue 1966-1970

	Percent Of Revenue 1966	Percent Of Revenue 1970
REVENUE	100%	100%
COSTS:		
Non-owner physician salaries	2.1%	1.6%
Non-physician salaries	11.8	12.4
Payroll taxes and fringe benefits	2.0	2.9
Drugs, medical supplies and lab	6.6	6.2
Occupancy, equipment and office	10.0	10.4
Insurance	1.6	2.4
Automobile	1.8	1.8
Other	3.4	3.5
TOTAL	39.3%	41.2%
EARNINGS	60.7%	58.8%

Exhibit IV shows the trends in the various cost categories as they relate to total cost. It may be observed that:

- *Salaries* and *Payroll Taxes and Fringe Benefits* accounted for 40.2% of total cost in 1966 and 41.1% in 1970.
- *Non-Owner Physician Salaries; Drugs, Medical Supplies and Laboratory; Occupancy; Automobile; and Other Costs* decreased as a percentage of total costs.
- *Non-Physician Salaries; Payroll Taxes and Fringe Benefits;* and *Insurance* increased their respective shares of total cost.

Exhibit IV

Cost Elements as a Percent of Total Cost 1966-1970

	Percent of Total Cost 1966	Percent of Total Cost 1970
COST ELEMENTS		
Non-owner physician salaries	5.3%	3.9%
Non-physician salaries	29.9	30.0
Payroll taxes and fringe benefits	5.0	7.2
Drugs, medical supplies and lab	16.8	15.2
Occupancy, equipment and office	25.4	25.2
Insurance	4.1	5.8
Automobile	4.7	4.3
Other	8.8	8.4
TOTAL	100.0%	100.0%

Exhibit V shows a "pie chart" of the 1970 costs.

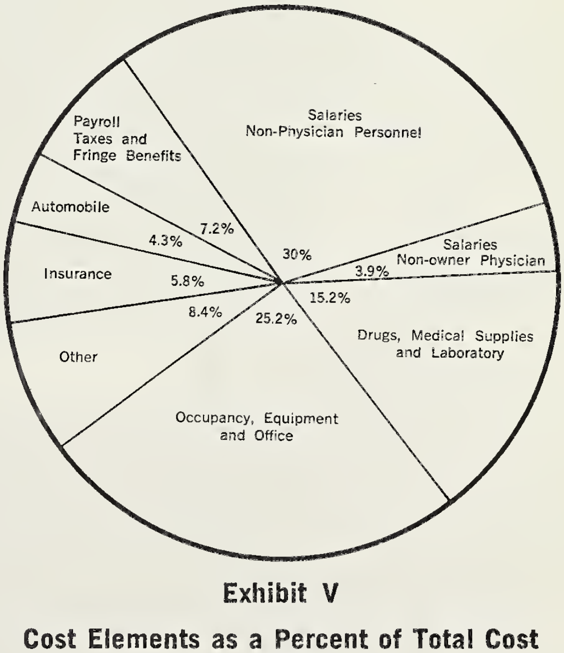


Exhibit V

Cost Elements as a Percent of Total Cost 1970

(Continued on Page 1048)

Mead Johnson—pharmaceuticals created for your specialized clinical needs

One good K-Lyte® deserves another...

Each effervescent tablet in solution supplies 25 mEq potassium as bicarbonate and citrate

Introducing

K·LYTE®/CL

Each dose in solution supplies 25 mEq. potassium chloride

potassium supplement with chloride

The good-tasting way to treat hypokalemias induced by thiazide diuretics and other drugs...

Here, at last, is a potassium chloride supplement that just doesn't taste like one! The mixed fruit flavor of new K-Lyte/Cl is truly refreshing. Now, K-Lyte/Cl offers your patients all of the therapeutic advantages you expect from a potassium chloride supplement. And you can be sure that your patients will take the K-Lyte/Cl you prescribe—all in good taste.

Now you have a choice...

When extra chloride is not desired, original effervescent K-Lyte is unsurpassed in flavor, effective and safe in short- or long-term potassium supplementation. There is little chance of taste fatigue from K-Lyte with two delicious, effervescent flavors to alternate...fresh-tasting orange and sparkling lime.

K-Lyte® Each effervescent tablet in solution supplies 25 mEq. potassium as bicarbonate and citrate

K-Lyte®/Cl Each dose of powder in solution supplies 25 mEq. potassium chloride

Each tablet or dose must be completely dissolved before taking.
Indications: K-Lyte and K-Lyte/Cl are oral potassium supplements for therapy or prophylaxis of potassium deficiency. Particularly useful when thiazide diuretics or corticosteroids cause excessive excretory potassium losses. **Contraindications:** Impaired renal function with oliguria or azotemia; Addison's disease; hyperkalemia from any cause. **Warnings and Precautions:** Since the amount of potassium deficiency may be difficult to determine accurately, supplements should be administered with caution, and dosages adjusted to the requirements of the individual patient. Potassium intoxication rarely occurs in patients with normal kidney function. Symptoms of potassium intoxication are variable. They include listlessness, mental confusion, and tingling of the extremities. Frequent checks of the clinical status of the patient, ECG, and serum potassium level are desirable. In established hypokalemia, attention should also be directed toward other potential electrolyte disturbances. Potassium supplements should be given cautiously to digitalized patients. To minimize the possibility of gastrointestinal irritation associated with the oral ingestion of concentrated potassium salt preparations, patients should be carefully directed to dissolve each dose completely in the stated amount of water. K-Lyte/Cl contains 4.9 grams (20 calories) of sucrose per dose which should be considered for patients with restriction of caloric intake. **Adverse Reactions:** Nausea, vomiting, diarrhea, and abdominal discomfort may occur with the use of potassium salts. **Dosage and Administration:** Adults: 1 tablet or dose *completely dissolved*, 2 to 4 times daily, depending upon the requirements of the patient: K-Lyte: 1 tablet (25 mEq. potassium) in *3 to 4 ounces of cold or ice water*; K-Lyte/Cl: 1 dose (25 mEq. potassium chloride) in *6 ounces of cold or ice water*. The normal adult daily requirement is approximately 50 mEq. of elemental potassium. NOTE: *It is suggested that these products be taken with meals and sipped slowly over a 5-10 minute period.* **How Supplied:** K-Lyte: Effervescent tablets—boxes of 30 and 250 (orange or lime flavors). K-Lyte/Cl: Powder, cans of 30 measured doses with scoop (fruit-punch flavor). ℞

© 1971 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U.S.A. 181471

Mead Johnson
LABORATORIES

Exhibit VI shows the specialties contained in each grouping.

Exhibit VI

Specialty Groupings

General Practice

General Practice

Medical Specialties

Allergy
Dermatology
Gastroenterology
Internal Medicine
Pediatrics

Surgical Specialties

Surgery
Neurological Surgery
Obstetrics and Gynecology
Ophthalmology
Orthopedic Surgery
Otolaryngology
Plastic Surgery
Proctology
Thoracic Surgery
Urology

Other Specialties

Anesthesiology
Neurology
Psychiatry
Pathology
Physical Medicine
Radiology
Unspecified

Exhibit VII compares the various specialty groups. Certain observations may be made:

- Surgery had the lowest ratio of costs to revenue in 1966 and also in 1970 compared to the other specialties in the exhibit.
- Internal Medicine was the only specialty of those shown reflecting a decrease in the cost to revenue ratio.
- General Practice experienced the highest ratio of costs to revenue in both 1966 and 1970.
- The highest per cent increase in cost was reported by Surgery.
- The lowest per cent increase in costs was reported by the Other Specialties.

Exhibit VII
1966-1970

	Percent Increase In Costs	Ratio: Costs To Revenue 1966	1970
SPECIALTY GROUP			
GENERAL PRACTICE	38%	42%	44%
Internal Medicine	42	41	40
Pediatrics	41	39	39
MEDICAL SPECIALTIES TOTAL	42%	40%	41%
Surgery	53	31	34
Obstetrics & Gyn	49	34	38
SURGICAL SPECIALTIES TOTAL	48%	35%	39%
OTHER SPECIALTIES	25%	41%	42%
TOTAL	40%	39%	41%

Geo-Economic Areas

Exhibit VIII compares the cost increases, cost to revenue ratios and trends for six selected geo-economic areas in the state. The following may be observed from this exhibit:

- Group 5 reported the lowest increase in average cost and also had a decrease in cost as a per cent of revenue.
- Group 4 showed the highest ratio of cost to revenue for 1970.
- The highest per cent increase in cost was reported by Group 3.

Exhibit VIII

AREA	Per Cent Increase In Costs	Ratio: Cost To Revenue 1966	1970
AREA 1 Upper Peninsula Counties	54%	40%	42%
AREA 2 Other Lower Peninsula Counties	51	38	41
AREA 3 Muskegon & Kent	56	36	42
AREA 4 Bay-Midland-Saginaw-Genesee-Arenac-Iosco	38	44	47
AREA 5 Kalamazoo-Calhoun-Jackson-Ingham	17	42	38
AREA 6 Washtenaw-Wayne-Oakland-Macomb	36	38	40
Unspecified	34	28	34
TOTAL	40%	39%	41%

Overhead Cost Trend Information — Size and Form of Medical Practice

Exhibit IX presents a comparison of cost trends by the size of medical practice and Exhibit X presents a comparison by form of medical practice.

Exhibit IX
Comparisons By Size Of Practice
1966-1970

SIZE OF PRACTICE	Ratio: Cost To Revenue 1966	1970
1	40%	41%
2 - 4	38	40
5 or more	39	52
TOTALS	39%	41%

(Continued on Page 1052)

25th AMA Clinical Convention

November 28 - December 1. 1971
New Orleans

at is the best way to keep pace with the
est medical techniques and advances?
Participate in the AMA's 25th Clinical
nvention in New Orleans on Nov. 28-
c. 1, 1971! Take part in a convention
ere participation is the key word. Reg-
er for Postgraduate courses. Use this
portunity to discuss and evaluate your
blems and findings with others in your
ticular field.

ndustrial and scientific exhibits will in-
m you about the latest research and the
vest products and services available.
gether with the scientific sessions, this
ormation will be of value when you re-
n to your practice.

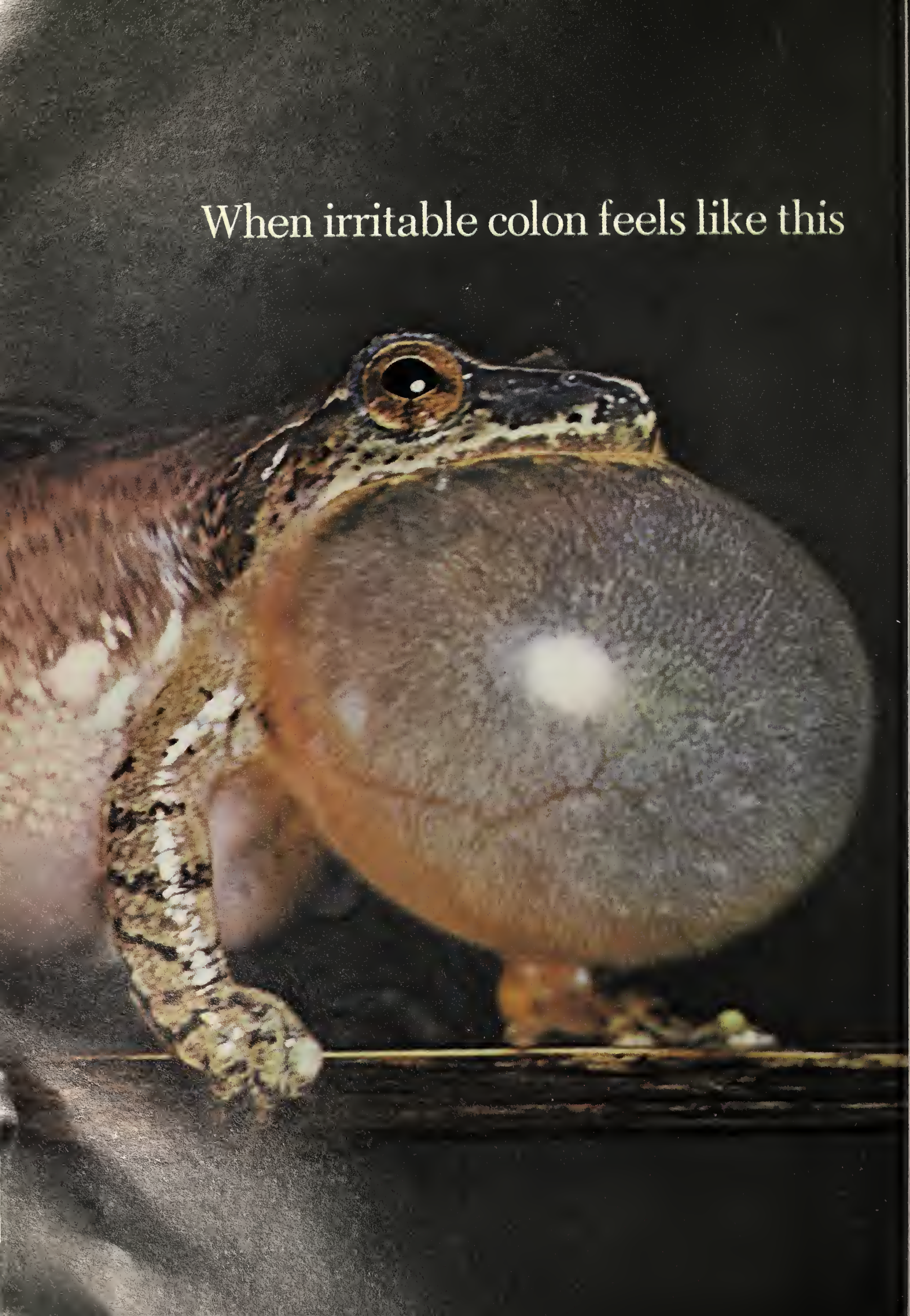
he Scientific Program will offer in-
pth courses on "Behavioral Problems
Children and Adolescents," "Cardio-
cular Disease," and "Fluid and Electro-
e Balance."

ther sessions of importance will dis-
s the "Diagnostic Evaluation and Man-
ement of Joint Diseases," "Derma-
ogical Problems in Everyday Practice,"
rrent Concepts of Gastroenterology,"
fice Gynecology: Management of Com-
n Problems" and a "Symposium on
erticular Disease of the Colon: Cur-
t Concepts."

legance and an old-world flavor make
w Orleans an exceptional site for the
h Clinical Convention. The Convention
nter provides excellent facilities. Hotels
or near the famed French Quarter
er choice accommodations.

onsider bringing the family. They can
lore the many historic sites in and
und the city, ride a steamship on the
ghty' Mississippi, shop for antiques,
browse in a fine selection of stores.
u'll find the charm of New Orleans ex-
ds to its restaurants where you'll sam-
the finest in French and Creole cooking.

his is a meeting in which you should
ticipate. Make plans now to attend this
portant AMA Scientific Meeting.


When irritable colon feels like this

. .in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED**® provides more complete relief:

☐ **belladonna alkaloids—for the hyperactive bowel**
☐ **simethicone—for accompanying distension and pain due to gas**
☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®
antispasmodic/sedative/antiflatulent

ng peeper (tree frog, *Hyla crucifer*):
mall amphibian can expand
roat membrane with air until it is
the size of its head.

Michigan State Medical Society
Trends in the Overhead Costs of Medical Practice

Exhibit X

Comparisons by Form of Practice
1966-1970

FORM OF PRACTICE	Ratio: Cost To Revenue 1966	1970
SOLO PRACTICES:		
Incorporated		40%
Unincorporated	40%	41
GROUP PRACTICES:		
Incorporated	35	45
Unincorporated	38	37
TOTAL	39%	41%

1970 Cost Information—Age and Hours

Exhibit XI presents a comparison of 1970 cost information by age groups and exhibit XII shows cost information by weekly hours of medical practice reported by participants.

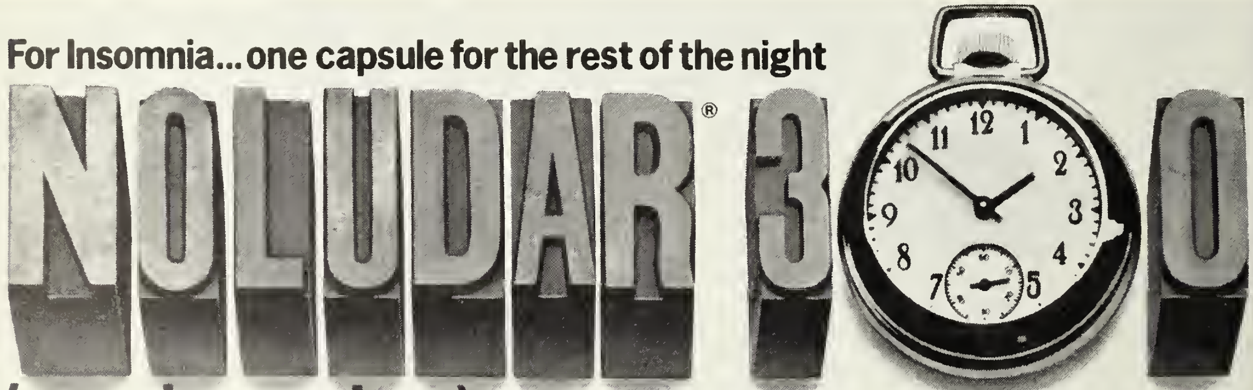
Exhibit XI
Comparisons by Physician Age Groupings
1970

AGE GROUP	Per Cent In Group	Ratio: Cost To Revenue
35 and below	6.1%	41%
36 - 45	31.4	42
46 - 55	32.1	40
56 - 65	21.6	41
Over 65	7.6	48
Unclassified	1.2	37
TOTALS	100%	41%

Exhibit XII
Comparisons by Weekly Medical Practice Hours
1970

HOUR GROUPINGS	Per Cent In Group	Ratio: Cost To Revenue
40 hours or below	19.8%	43%
41 - 50 hours	23.5	45
51 - 60 hours	32.3	40
61 - 70 hours	16.7	36
71 - 80 hours	5.2	46
Over 80 hours	2.5	42
TOTAL GROUP	100%	41%

For Insomnia...one capsule for the rest of the night



(methyprylon)

Before prescribing, please consult complete product information, a summary of which follows:
INDICATION: Relief of insomnia of varied etiology.
CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.
WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.
Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.
Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.
PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.
ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

ROCHE

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Michigan Mediscene

Nov. 10—Michigan Doctors Political Action Committee, MSMS Headquarters, East Lansing, 6 p.m., contact: Mrs. Sherry Hall, MSMS Headquarters

Nov. 10—MSMS Council, MSMS Headquarters, East Lansing, noon to 5 p.m., contact: Warren F. Tryloff, MSMS director

Nov. 11—Michigan Health Council, annual meeting, 10 a.m. to 5 p.m., MSMS Headquarters, contact: John A. Doherty, MHC executive vice president, 712 Abbott, East Lansing, 48823

Nov. 17—Council of Specialty Societies, 2 p.m., MSMS Headquarters, contact: Glenn E. Moore, MD, CSS moderator, 323 W. Second, Flint, 48503

Nov. 23—Regional Advisory Group, Michigan Association for Regional Medical Programs, 1 p.m., MSMS Headquarters, contact: Miss Gaetane LaRocque, acting coordinator, MARMP, 1111 Michigan, East Lansing, 48823

Nov. 23-Dec. 10—Many Michigan physicians will be attending the AMA Clinical Convention in New Orleans; for program, write AMA, 535 N. Dearborn, Chicago, 60610

Dec. 1-2—Detroit Trauma Day, Wayne County Medical Society Headquarters, Detroit, contact: Robert Wilson, MD, Department of Surgery, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Dec. 5—Michigan Academy of General Practice, board meeting, 2 p.m., MSMS Headquarters, contact: Louis R. Zako, MD, president, 7720 Allen Road, Allen Park, 48101

Dec. 8—MSMS Council, MSMS Headquarters, East Lansing, 9:30 a.m., contact: Warren F. Tryloff, MSMS Director, MSMS Headquarters

Dec. 8—11th Annual Thyroid Workshop, sponsored by Thyroid Service of Wayne State University School of Medicine, Wayne County Medical Society Auditorium, Detroit; contact: Ali Abbasi, MD, Publicity Committee, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit, 48207

Jan. 7, 8, and 9, 1972—Michigan Allergy Society Family Winter Weekend, Shanty Creek Lodge, contact: Rudolph E. Wilhelm, MD, Michigan Allergy Society, 751 S. Military Road, Dearborn, 48124

(Continued on Page 1057)

Au Revoir

By A. Stewart Kerr
MSMS Legal Counsel

We have for several years preached 3 basics that avoid malpractice suits: practicing good medicine; good records; communication. At the recent Grand Rapids meeting, a doctor challenged us to name some one specific thing—just one item—that would improve patient communication/good will.

One answer: Learn to say "good-bye."

Good-Bye? Yes. "Good-Bye" when you leave your office patient. The doctor mumbles a bit and departs with no clear indication concerning his return. Some even say "wait here," falsely suggesting the doctor's return or that some other instruction is involved (resting, awaiting a prescription, awaiting the setting of another date by a secretary, etc.). The patient sits in his cubicle, uncertain whether to wait or depart. He leaves with a bad taste in his mouth.

Doctor, a pleasant good-bye, even a handshake, costs you nothing. Litigation costs plenty.

"Good-bye."

1972 Conference on Maternal Health Set March 29 - 30

Michigan's family physicians, pathologists, obstetricians-gynecologists and pediatricians may mark their calendars now for the 1972 Michigan Conference on Maternal and Perinatal Health, which will consider "What's New in '72."

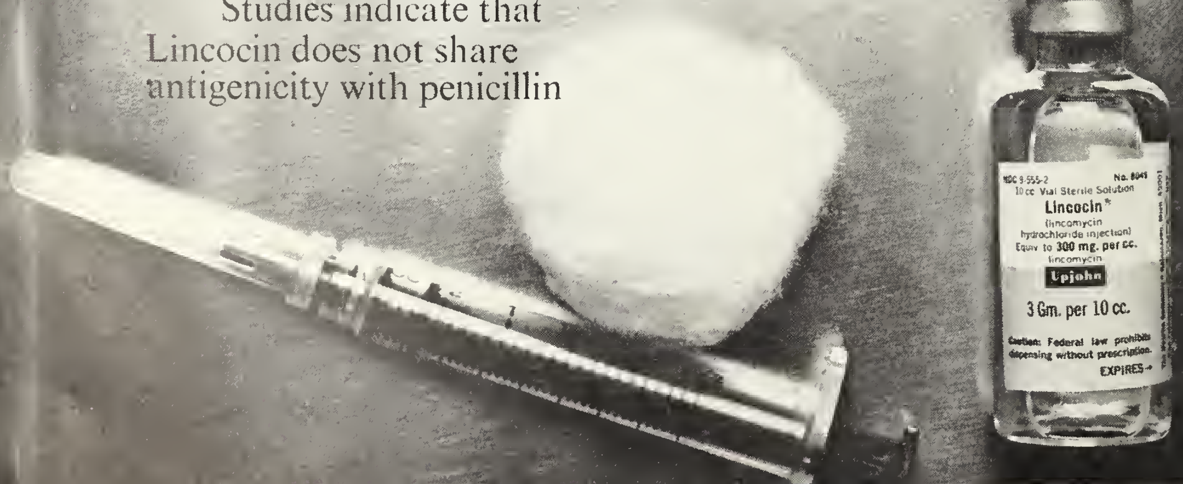
The conference is scheduled for March 29-30 at the Olds Plaza Hotel, Lansing. Chairman is Joseph L. Sheets, MD, Lansing.

Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With ß-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.


NDC 9-555-2
No. 8045
10 cc Vial Sterile Solution
Lincocin®
(lincomycin hydrochloride injection)
Equiv to 300 mg. per cc. lincomycin
Upjohn
3 Gm. per 10 cc.
Caution: Federal law prohibits dispensing without prescription.
EXPIRES→

So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

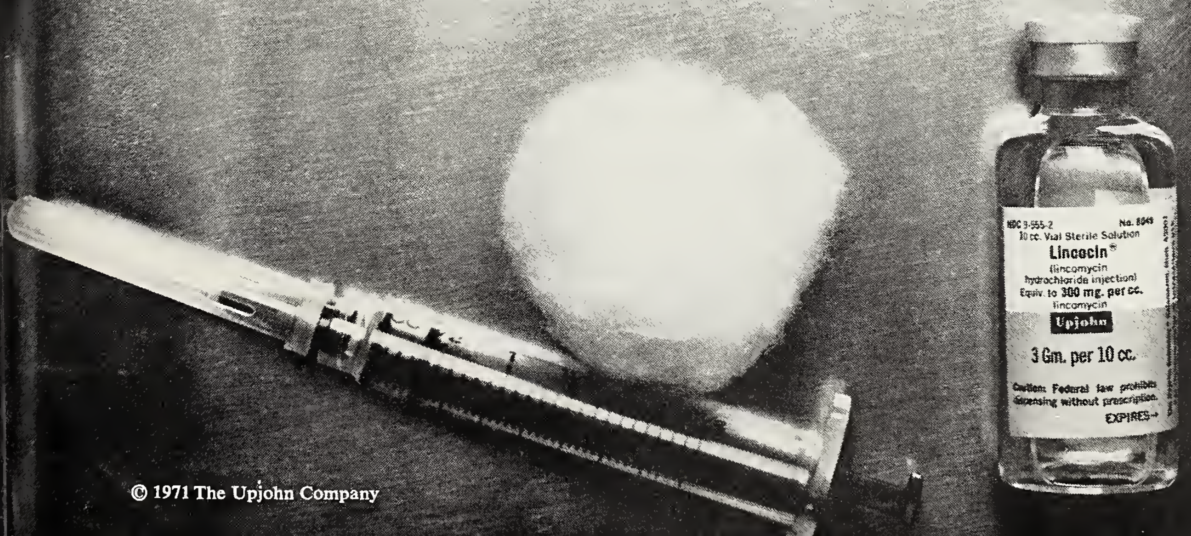
Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.


NDC 3-555-2
No. 8049
10 cc. Vial Sterile Solution
Lincocin®
(lincomycin
hydrochloride injection)
Equiv. to 300 mg. per cc.
lincomycin
Upjohn
3 Gm. per 10 cc.
Caution: Federal law prohibits
dispensing without prescription.
EXPIRES→

© 1971 The Upjohn Company

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

Syrup, 250 mg. per 5 ml.—60 ml. and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

JA71-1203 MED B-5-SR (KZL-6)

The Upjohn Company
Kalamazoo
Michigan 49001

Upjohn

MSMS to study ways to slow rise in hospital costs

An investigation of possible ways and means to retard the rising costs of hospital construction will be initiated by the Michigan State Medical Society.

The MSMS House of Delegates, in session Oct. 3-5 in Grand Rapids, proposed to involve the Michigan Department of Public Health, the Michigan Association of Osteopathic Physicians and Surgeons, the Michigan Hospital Association, and the Michigan Osteopathic Hospital Association in the investigation.

The MSMS resolution pointed out that "hospital construction costs are directly related to a multitude of rules, regulations and other factors," which will be studied by the proposed committee.

The resolution also said that "hospital construction costs now may approach $100,000 per bed and appear to be increasing."

Eight entries win honors in doctors', wives' art show

A blown glass bottle and a textile wall hanging were among eight winning exhibits in the Doctors' and Wives' Art Show during the 1971 MSMS Annual Session in Grand Rapids.

Mrs. David B. (Janis) Hawtof of Southfield displayed the bottle, while the wall hanging was the work of Mrs. Leonard (Dora) Rosenzweig of Grand Rapids. Other winners are Mrs. Lee (Jo) Carrick of Grosse Pointe, for an acrylic painting; Glendon B. Goddard, MD, Otsego, oil painting; R. Jack Chase, MD, Grand Rapids, photography; Gretchen Minnhaar (Mrs. Louis Tomatis), Grand Rapids, a lithograph; Magnus H. Agustsson, MD, Lansing, an etching, and Ralph Blocksma, MD, Grand Rapids, photography.

Judges for the art show, part of the 106th annual MSMS meeting, were Armand Merizon, Grand Rapids artist, and Fred Meyer, director, Grand Rapids Art Museum.

Jan. 25—Woman's Auxiliary to MSMS, Executive Committee Meeting, MSMS Building (State Officers, Committee Chairmen, District Directors, County Presidents)

Jan. 29-30—Educational seminar and board meeting, Michigan State Medical Assistants Society, Holiday Inn, Battle Creek, contact: Patricia Voke, 196 S. Woodrow Ave., Battle Creek, 49015

March 26—Board Meeting, Michigan State Medical Assistants Society, noon, MSMS Headquarters

March 29—Muskegon Trauma Day, Holiday Inn, Muskegon, contact: Guida Annessa, MD, 205 Medical Arts Center

March 29-30—Annual Michigan Conference on Maternal and Perinatal Health, Olds Plaza Hotel, Lansing; contact: Joseph L. Sheets, MD, 2909 E. Grand River, Lansing; or Helen Schulte, MSMS Headquarters

April 3—Annual Beaumont Lecture, Wayne County Medical Society, Detroit

April 19—Woman's Auxiliary to MSMS, Legislative Day, Olds Plaza, Lansing

April 19-20—Woman's Auxiliary to MSMS, Spring Conference (following Legislative Day), Hospitality Inn, East Lansing

April 27-28—Fourth Annual Spring Mental Health Meeting, Kellogg Center, East Lansing, contact: Herbert B. Fowler, MD, Department of Psychiatry, MSU, East Lansing, 48823

April 27-30—Annual Convention, Michigan State Medical Assistants Society, Holiday Inn, Crosstown Parkway, Kalamazoo, contact: Mrs. Betty Boers, 1116 Sheridan, Kalamazoo, 49001

May 22-23—Michigan Chapter Meeting and Scientific Session of the American College of Emergency Physicians, Shanty Creek, Bellaire, Michigan

June 2 and 3—Gaylord Trauma Day, Hidden Valley Otsego Ski Club, Gaylord, contact: Benjamin Henig, MD, Keyport Clinic, 308 Michigan Ave., Grayling, 49738

June 5, 6, 7—Initial Management of the Acutely Ill and Injured Patient, Ann Arbor, contact: Charles F. Frey, MD, Department of Surgery, University of Michigan Medical Center, Ann Arbor, 48104

Copies of AMA *Horizons Unlimited* career handbook with the Michigan insert about Michigan schools offering health career courses have been distributed by Doctors Rodney J. Rogers and Lloyd E. Appell of Vicksburg to "Candy Stripers" at the local hospital there.

Copies of both are available to MSMS members by writing to MSMS, Box 950, East Lansing, Mi 48823.

New Members

Members of the Michigan State Medical Society join in welcoming the following new members into a progressive state medical organization. MSMS is dedicated to promoting the science and art of medicine, the protection of the public health, and the betterment of the medical profession. Each new member is encouraged to join with other MSMS members at both the local and the state levels in achieving these goals.

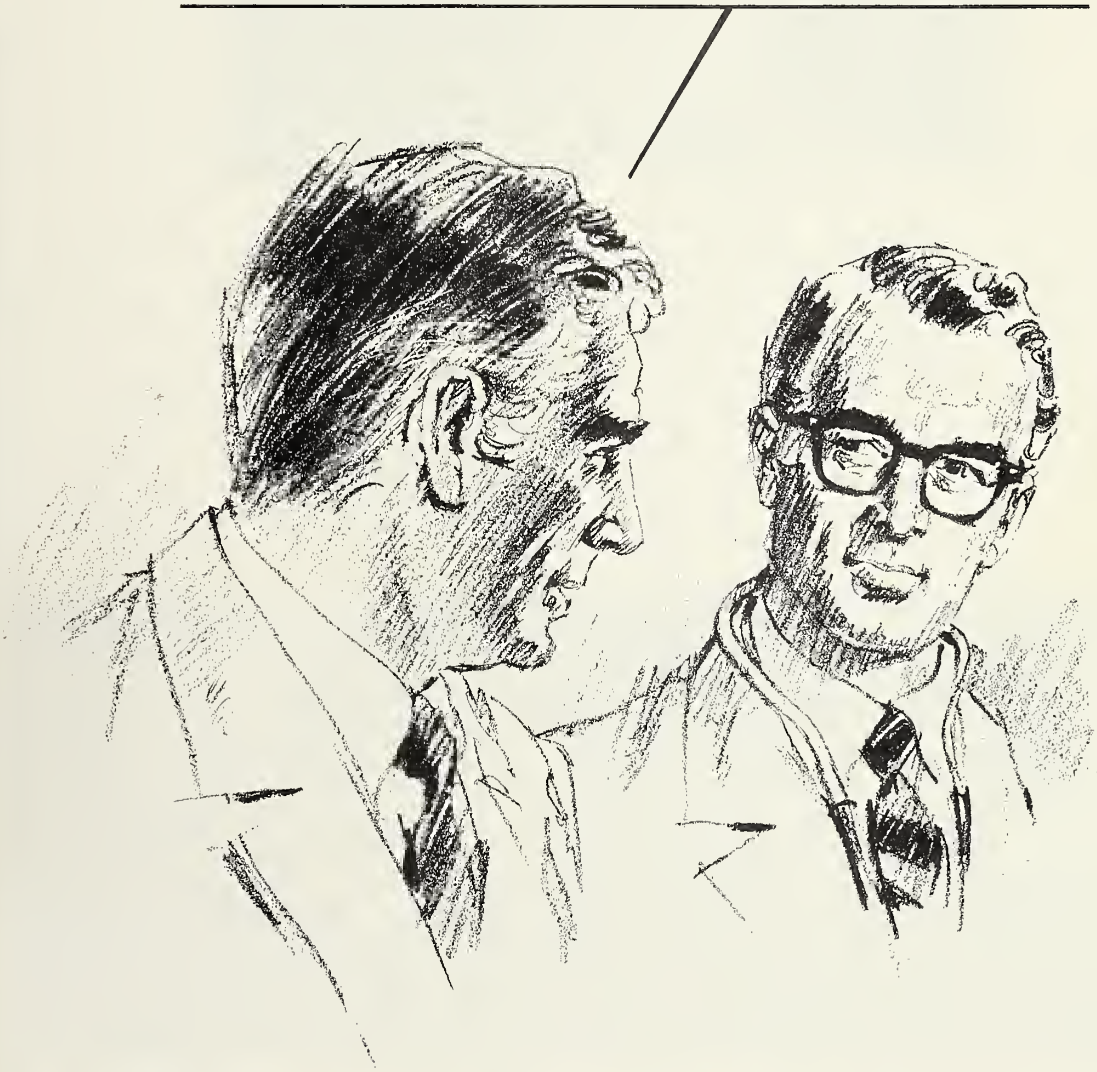
Raymond E. Beckering, MD, P.O. Box 684, Grand Haven 49417
Emanuel R. Casenas, MD, 29226 Orchard Lake Rd., Farmington 48024
Philip G. Cramer, MD, Wayne County Health Dept., Eloise 48132
Donald A. Dephouse, MD, 30 E. Ninth St., Holland 49423
Jerry J. Evans, MD, 3160 Christy Way, Saginaw 48603
Sunilendu N. Ganguly, MD, Hutzel Hospital, Detroit 48603
Lowell I. Goodman, MD, Parke, Davis & Co., 2800 Plymouth Rd., Ann Arbor 48105
Mark W. Harrold, MD, 326 W. Ionia St., Lansing 48933
Robert P. Heidelberg, MD, 13701 W. Seven Mile Rd., Detroit 48235
Ray E. Helfer, MD, Dept. of Human Development, Michigan State University, East Lansing 48823
Charles N. Inniss, MD, 3750 Woodward Ave., Detroit 48201
James J. Karo, MD, Henry Ford Hosp., Detroit 48202
E. R. Lamaque, MD, 1028 Stone St., Flint 48503
Rosie M. Lamaque, MD, 1028 Stone St., Flint 48503
Hahn J. Lee, MD, 24601 Coolidge, Oak Park 48237
Ian D. Mackay, MD, 3800 Woodward Ave., Detroit 48201
Gerald A. Moore, MD, 801 David Whitney Bldg., Detroit 48226
Edwardo L. Reyes, MD, Howell State Hospital, Howell 48843
Shi Hung Rhew, MD, P.O. Box 45, Eloise 48132
Ghassan M. Rifai, MD, 3955 Fort St., Lincoln Park 48146
Leland E. Rogge, MD, 2326 Burchard, S.E., Grand Rapids 49506
Renato S. Roxas, MD, 3901 Beaubien, Detroit 48201
Orlando S. Sison, MD, 1400 Chrysler Expwy., Detroit 48207
Robert Sosa, MD, P.O. Box 32, Belding 48809
Hans J. Stein, MD, Wm. Beaumont Hospital, Royal Oak 48072
Romeo H. Tabbilos, MD, 1315 Kales Bldg., Detroit 48226
Amod S. Tootla, MD, Henry Ford Hospital, Detroit 48202
Ernesto C. Tuazon, MD, Detroit Memorial Hospital, Detroit 48226
Anselmo F. Unite, MD, 770 Fisher Bldg., Detroit 48202
Satish K. Vij, MD, Wm. Beaumont Hospital, Royal Oak 48072

PERFECT MAKES PRACTICE.

And "perfect" is what the Fisher Building offers a professional practice: Unmatched office facilities; indoor parking contiguous to your office; a location that's easy for you and your patients to reach from the entire metropolitan area. You're near the many specialists in the profession, as well as labs and hospitals, making internal referrals most practical for both patient and physician. Near, of course, to shops and restaurants, to a bookstore and banks and a post office, and the magnificent Fisher stage. It's an atmosphere to accomplish things in. Call us now for diagnosis and consultation on your office needs. As our patient you will find your office problems cured!

THE FISHER BUILDING
Across from General Motors Building
Detroit 48202 • Phone 874-4444

For my patients who need a laxative, I recommend EVAC-U-GEN . . . because it relieves constipation gently . . . particularly important in cardiac and post surgical patients



EVAC-U-GEN® *CHEWABLE*
VERY PALATABLE
ECONOMICAL

A highly-flavored and palatable tablet of yellow phenolphthalein, bismuth subcarbonate, bismuth subgallate in special base. Chewable. Bottles of 35 and 100. Adult Dose: Chew 1 or 2 tablets night or morning. Children (up to age 10): 1/2 tablet. A citrus drink taken with tablet will stimulate action.

PRECAUTION: Do not use when symptoms of appendicitis are present and discontinue use if skin rash appears. Dependence on laxatives can result from continued use.

WALKER, CORP & CO., INC. Syracuse, New York 13201

Clark McColl, MD, right, endorses a check representing the first gifts to the newly-created Clarke McColl Education Fund at Henry Ford Hospital. Accepting are Richmond W. Smith, Jr., MD, Center, chairman of the department of medicine, and Stanley R. Nelson, executive director. The funds are the gifts of patients and friends honoring Doctor McColl for his 48 years of service to the hospital until his retirement this year. The money will help educate residents, interns and students, in whom Doctor McColl has had a continuing interest.

BRIGHTON HOSPITAL

A non-profit foundation

FOR ALCOHOLISM

Member, Michigan Hospital Association, American Hospital Association

A facility designed to rehabilitate and aid the compulsive drinker in arresting his addiction.

Brighton Hospital meets the standards established by the Michigan State Board of Alcoholism and is recommended by that Board.

12851 East Grand River
One block south of I-96 at Kensington Rd. Exit
four miles east of U.S. 23
Brighton, Michigan
ACademy 7-1211

(A 16-m.m. sound color film on Brighton Hospital is available for free loan to qualified groups.)

U-M med students selected on basis of social concern

The class of 1975 of the University of Michigan Medical School, which consists of 225 future physicians, is one of the largest in the United States and was selected out of a record number of 3,096 applicants.

As a result, competition was the most intense in the history of the 120-year-old school, according to Harvey V. Sparks, MD, chairman of the admissions committee. The final selections took months and required more than 900 interviews by the 15 faculty and student members of the admissions committee. In addition to intelligence and an aptitude for science, social concern was sought.

The selected students are characterized by a commitment to society and are "the best prepared we could find to make a significant contribution to their fellow men," according to Dr. Sparks.

The class is made up of 198 men and 27 women and includes one American Indian, one Chicano, and 25 black students. The undergraduate majors of the U-M class vary from anthropology and astronomy to religion and zoology. Biology is the most popular major.

HEW grant to Detroit supports new drug centers

Planning began on Nov. 1 for a new Drug Abuse Treatment and Rehabilitation Program in Southwest Detroit, supported by an HEW grant.

The grant is for heroin addiction treatment centers and adolescent counseling for drug abusers. HEW will provide $500,000 for the first two years, or 90% of the costs of staffing the project. The HEW share will drop to 80% the third year, 75% the fourth and fifth years and 70% the sixth-eighth years. The City of Detroit will meet the rest of the costs.

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road
Conducted by Sisters of Mercy
Ann Arbor, Michigan
Telephone — 313 663-8571

Mercywood Hospital is a private neuropsychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multi-disciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs

MERCYWOOD MEDICAL STAFF
(Active & Associate)

Robert J. Bahra, M.D.
Dean P. Carron, M.D.
Francis M. Daignault, M.D.
Gordon C. Dieterich, M.D.
James R. Driver, M.D.
Alexander P. Dukay, M.D.
Robert L. Fransway, M.D.
Stuart M. Gould, Jr., M.D.
Sydney Joseph, M.D.
Hubert Miller, M.D.
Jacob J. Miller, M.D.
Rudolf E. Nobel, M.D.
Gerard M. Schmit, M.D.
Joseph J. Tiziani, M.D.
Prehlad S. Vachher, M.D.
Richard D. Watkins, M.D.
Robert M. Zimmerman, M.D.

About doctors

Frederick H. Epstein, MD, Ann Arbor, delivered the fourth annual George C. Griffith Scientific Lecture Oct. 13 before the Los Angeles County Heart Association. Doctor Epstein, of the U-M School of Public Health, discussed "Coronary Heart Disease Revisited—Clinical Lessons from Epidemiology."

Fred J. Hodges, MD, Ann Arbor, is one of three persons presented the Distinguished Alumni Award at the annual joint reunion luncheon of the U-M Medical School and School of Nursing late in September. Doctor Hodges is assistant to the dean of the Medical School and professor emeritus of radiology.

Don P. Jones, MD, Detroit, is newly-appointed chief of the section of gastroenterology at Hutzel Hospital. Doctor Jones is also associate professor of medicine at WSU School of Medicine, where he has been teaching since 1965.

John H. Kitchel, MD, Grand Haven

John H. Kitchel, MD, Grand Haven, has been elected chairman of the Michigan Water Resources Commission. Doctor Kitchel was awarded a 1970 Flag Award by MSMS, an honor presented to doctors who have served as presidents of state-wide non-medical organizations. He has served as president of the Michigan United Conservation Clubs.

Harold A. Oberman, MD, Ann Arbor, medical director of the U-M Medical Center Blood Bank, is new chairman of the Committee on Standards of the American Association of Blood Banks.

Erwin Robin, MD, Oak Park, assistant professor of medicine at the Wayne State University School of Medicine, has been appointed chief of the section of cardiology at Hutzel Hospital, Detroit. A graduate of the WSU School of Medicine in 1960, he received the Hekton Silver Medal at the AMA convention in 1968.

Lee B. Stevenson, MD, Farmington, is new president of the Michigan Society of Obstetricians and Gynecologists. Joseph J. Woods, MD, Ypsilanti, is new president-elect.

Three U-M specialists traveled recently to Morocco to assist in the birth of a new member of the royal family there. Samuel J. Behrman, MD, professor of obstetrics and gynecology, was a key specialist on hand for the delivery Sept. 10. With him as consultants were William J. Oliver, MD, chairman of the U-M Department of Pediatrics, and Robert B. Sweet, MD, professor and chairman of the Department of Anesthesiology. The new mother, a Moroccan princess, had been a patient at the medical center under the care of Doctor Behrman and had visited the medical center during the course of her treatment.

C. Mark Vasu, MD, Grand Rapids, is the 1971 recipient of the outstanding citizen award of the national Fraternal Order of Police, for his active promotion of efficient ambulance and emergency service in Kent County since 1967. Doctor Vasu has been honored also by city officials, accident victims, and President Nixon. He is one of six men in the country to receive the FOP award.

Robert B. Carbeck, MD, Ann Arbor

At recent elections held by the Michigan Association for Graduate and Post Graduate Medical Education, Robert B. Carbeck, MD, was chosen secretary-treasurer of the organization. Doctor Carbeck is chief of internal medicine at St. Joseph Mercy Hospital, Ann Arbor. He succeeds E. Marshall Goldberg, MD, director of Medical Education at Hurley Hospital, Flint, and currently president-elect of the association. Robert E. Bowsher, MD, Midland, was elected president.

Doctor Kahn highly recommends service with S.S. HOPE

The physician who accompanies the S.S. HOPE on its cruises of mercy around the world will get more out of the experience than he gives.

That is the observation of Edgar A. Kahn, MD, Ann Arbor neurosurgeon. Doctor Kahn recently spent six weeks aboard the ship at Kingston, Jamaica, and highly recommends the volunteer service to other Michigan doctors.

"Anybody interested in people will really get something out of it," says Doctor Kahn, who was on his first mission with the ship and "would like very much to go" again two years from now when the S.S. HOPE is in Venezuela.

Myron E. Wegman, MD, Ann Arbor, was installed Oct. 15 as president of the American Public Health Association. Doctor Wegman is dean of the University of Michigan School of Public Health and formerly served as chairman of the APHA executive board.

Rudolf E. Wilhelm, MD, Dearborn, leads the Michigan Allergy Society as 1971-72 president. President-elect is Peter P. Barlow, MD, Birmingham.

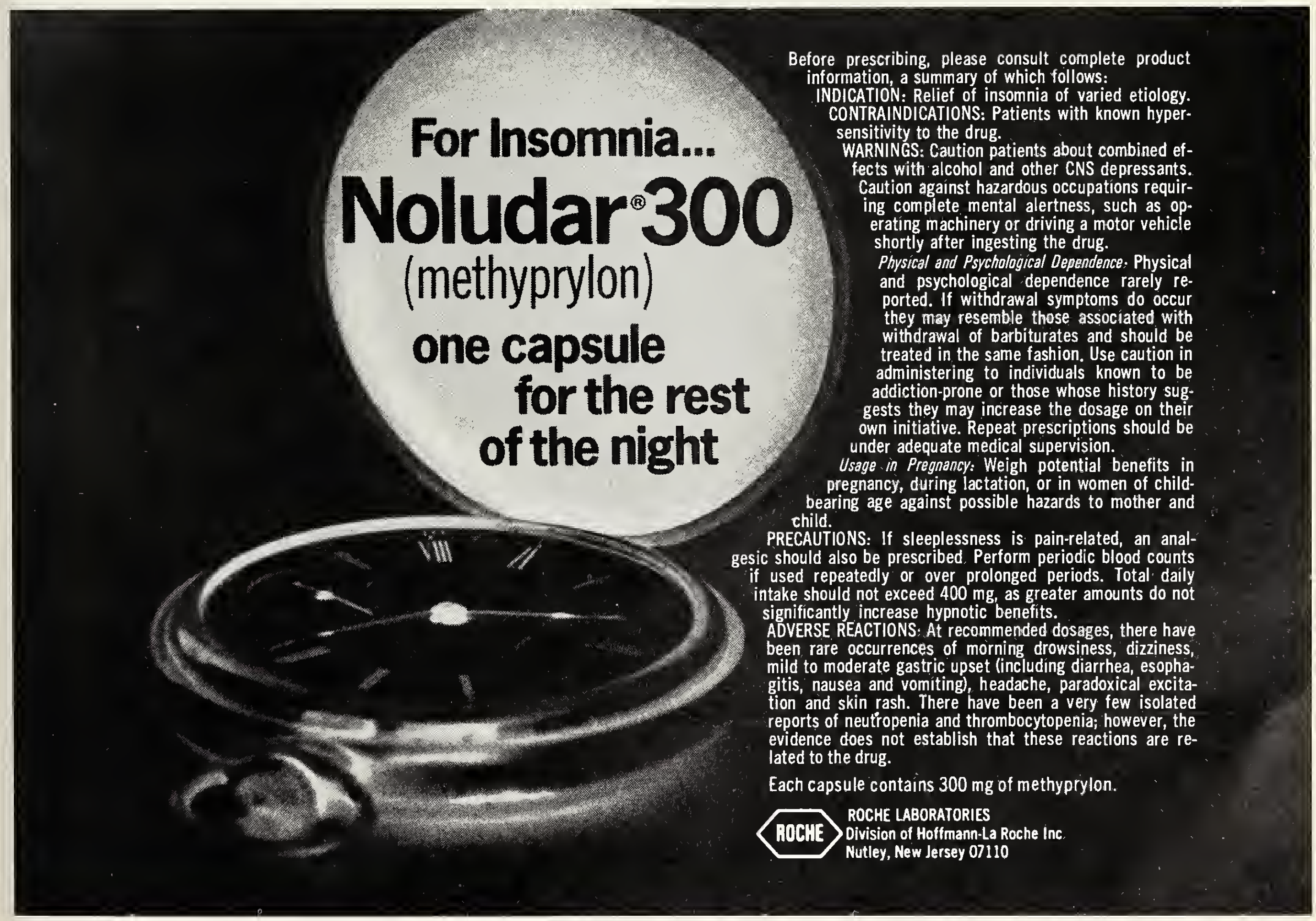
Retarded Children's Association elects Doctor Nicholson

Newly elected officers of the Michigan Association for Retarded Children were chosen at the association's 20th Annual Conference in Grand Rapids. Selected as president was Lee H. McNally, Detroit. First vice-president will be Ivan Nicholson, MD, Kalamazoo. Elected as second vice-president was Charles V. Mange, Ph.D., Lansing. Mrs. Agnes Wisner, Kalamazoo, and Robert Beauchamp, Detroit, have been chosen as secretary and treasurer, respectively.

Giles G. Bole, Jr., MD, Ann Arbor, is new physician-in-charge of the Rackham Arthritis Research Unit in the U-M Department of Internal Medicine. The unit staff has been investigating the process of inflammation and the biochemical character of connective tissue.

Neal A. Vanselow, MD, Ann Arbor, is acting chairman of the Department of Postgraduate Medicine, to head the department while a search committee finds a successor for Harry A. Towsley, MD, who retired in June as chairman of the department.

James V. Neel, MD, Ann Arbor, chairman of human genetics at the University of Michigan, has been elected to the American Academy of Arts and Sciences. Doctor Neel is also a member of the council of the National Academy of Sciences and received the 1960 Albert Lasker Basic Medical Science Research Award for major contributions to the development of human genetics.



Before prescribing, please consult complete product information, a summary of which follows:

INDICATION: Relief of insomnia of varied etiology.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness, such as operating machinery or driving a motor vehicle shortly after ingesting the drug.

Physical and Psychological Dependence: Physical and psychological dependence rarely reported. If withdrawal symptoms do occur they may resemble those associated with withdrawal of barbiturates and should be treated in the same fashion. Use caution in administering to individuals known to be addiction-prone or those whose history suggests they may increase the dosage on their own initiative. Repeat prescriptions should be under adequate medical supervision.

Usage in Pregnancy: Weigh potential benefits in pregnancy, during lactation, or in women of childbearing age against possible hazards to mother and child.

PRECAUTIONS: If sleeplessness is pain-related, an analgesic should also be prescribed. Perform periodic blood counts if used repeatedly or over prolonged periods. Total daily intake should not exceed 400 mg, as greater amounts do not significantly increase hypnotic benefits.

ADVERSE REACTIONS: At recommended dosages, there have been rare occurrences of morning drowsiness, dizziness, mild to moderate gastric upset (including diarrhea, esophagitis, nausea and vomiting), headache, paradoxical excitation and skin rash. There have been a very few isolated reports of neutropenia and thrombocytopenia; however, the evidence does not establish that these reactions are related to the drug.

Each capsule contains 300 mg of methyprylon.

ROCHE
ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

MDPAC Congressional Luncheon draws large crowd

Sen. Robert M. Griffin, left, was the keynote speaker at the luncheon. His host was James P. Muldoon, MD, Grand Rapids, Kent County Medical Society president.

The ballroom of the Pantlind Hotel was the scene of the congressional luncheon, held Oct. 4 during the 1971 MSMS Annual Session.

Important personalities at the head table were, from left, William G. Zimmerman, MD, Grand Rapids, luncheon chairman, and MDPAC board member; Jack Stack, MD, Alma, MDPAC executive committee; Louis R. Zako, MD, Allen Park, MDPAC chairman, and Sen. Griffin.

Ten Michigan physicians were presented to the House of Delegates in special ceremonies Oct. 4 honoring their 50 years of practice each. They are, from left in back, Harotune Yesayian, MD, Detroit; Volney N. Butler, MD, Detroit; Perry C. Gittins, MD, Birmingham; Eugene Osius, MD, Detroit; Harold St. John, MD, Pontiac; Bowers H. Growt, MD, Addison; and front, Malcolm D. MacQueen, MD, Detroit; Leland E. Holly, Sr., MD, Muskegon; Benedetto Pugliesi, MD, East Detroit, and Laslo Galdonyi, MD, Detroit.

Ross V. Taylor, MD, Jackson, retiring Council chairman, reports to the MSMS House during Annual Session proceedings.

Winners in the Doctors' and Wives' Art Show included, from left, Magnus H. Agustsson, MD, Lansing, for his etching; Dora (Mrs. Leonard) Rosenzweig, Grand Rapids, textile wall hanging, and Gretchen Minnhaar (Mrs. Luis Tomatis), Grand Rapids, lithograph.

One important scientific meeting dealt with The Pill and Breasts, and was moderated by Michael J. Brennan, MD, Detroit, left. On the panel were Sarjit Singh, MD, Flint, center, and Joseph Meites, PhD, East Lansing.

Radio, TV and newspaper reporters made the newsroom their headquarters at the Annual Session. Richard R. Galpin, MD, Birmingham, right, held forth in the newsroom one day with, Millicent Lane, **The State Journal,** Lansing; Jay Gossett, midwest editor, **Medical Economics,** and Jean Pearson, **The Detroit News.**

Ancillary

Local health groups don't cooperate, they compete, says prof

Physicians are increasingly aware of conflicting interests among some community health groups. So is Harold L. Nix, University of Georgia professor and community planning specialist.

Professor Nix, in a recent HEW booklet, writes that "the force underlying community-wide cooperation is not as often a common goal as it is interdependence brought about by the increasing specialization of community groups."

An expert in community power structures, Professor Nix explains that often groups brought together to work on health issues really "are basically oriented to different goals" and that they may go to meetings "to defend the interests of the organizations they represent."

Professor Nix advises that if a county medical society president or a county health director wishes to understand his community, he should first focus his attention on all the allied groups, and second, "dispell the notion that communities are basically systems of cooperating individuals, groups and organizations." Instead, he points out that these groups and people are really quite competitive.

An appeal for cooperation is made by Professor Nix, who writes "the nature of adaptive community is not one with complete harmony and consensus, but one whose specialized leaders and group representatives realize that their interdependency requires an organized approach to compromise and a system of conflict management. Furthermore, the need for an organized or patterned leadership structure for controlling competition and conflict becomes greater as the community grows larger, more complex, and more interdependent."

Professor Nix wrote a publication, "Identification of Leaders and Their Involvements in the Health Planning Process" for the U.S. Department of Health, Education, and Welfare. It is available for 35 cents as Public Health Service Publication No. 1998 from HEW; or it may be borrowed from MSMS. Dr. Nix holds a joint appointment at the University of Georgia in the Department of Sociology and the Institute of Community and Area Development.

Miltown®
(meprobamate)

Still serving...

Miltown®
(meprobamate)

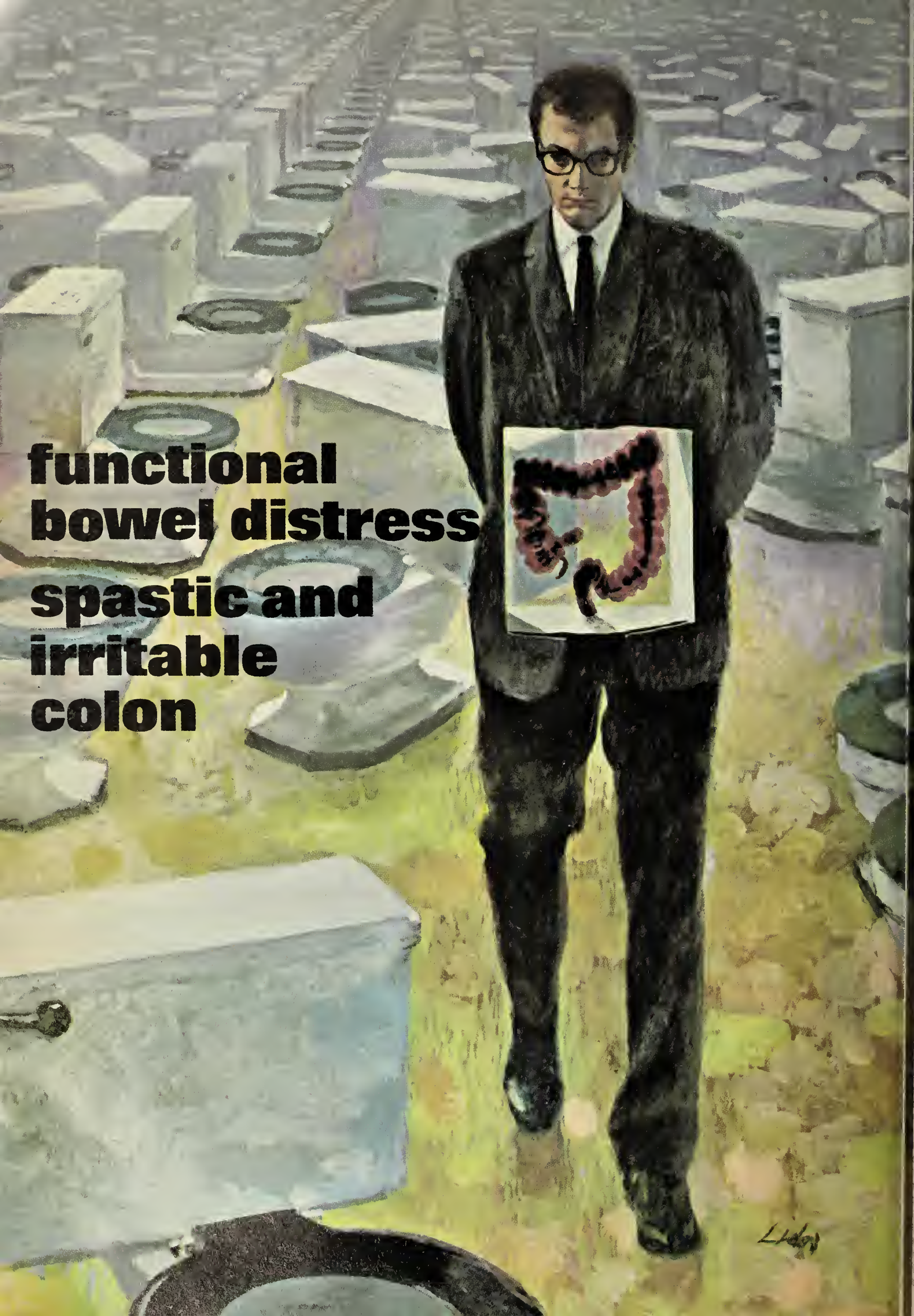
WALLACE PHARMACEUTICALS
Cranbury, N.J. 08512

DARVON®
COMPOUND-65
65 mg. propoxyphene hydrochloride, 227 mg.
aspirin, 162 mg. phenacetin, and 32.4 mg. caffeine
Lilly
H06

Additional information available to the profession on request.
Eli Lilly and Company • Indianapolis, Indiana 46206

Lilly

101488



functional bowel distress spastic and irritable colon

move up to "the Robinul response"

when lower G-I symptoms demand a potent synthetic antispasmodic

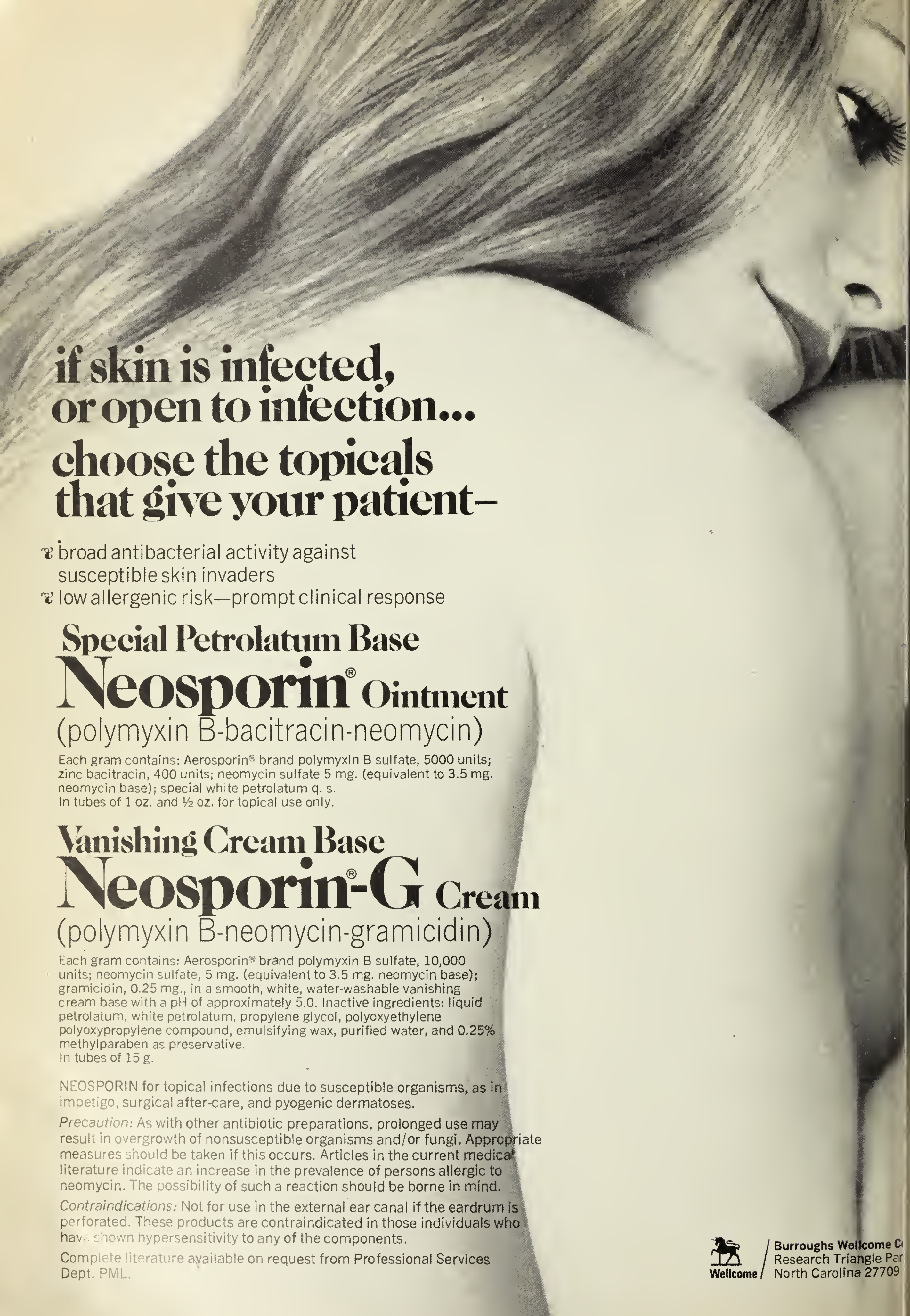
In treating hypermotility associated with functional lower G-I disorders are you disappointed in the results you've been getting with some of the synthetics? Then *move up* to a potent antispasmodic—Robinul® Forte (2 mg. glycopyrrolate). It provides prompt, pronounced, prolonged suppression of hypermotility, making it a highly effective agent in functional bowel distress, as well as in spastic and irritable colon. Robinul Forte also exerts a more selective action on the gastrointestinal tract. If the patient has a "one tract mind" concerning his lower G-I symptoms, you can help control the anxiety and tenseness by prescribing Robinul®-PH Forte (2 mg. glycopyrrolate with 16.2 mg. phenobarbital —warning: may be habit forming).

Robinul® 2 mg. Forte (glycopyrrolate)

IDICATIONS Robinul Forte (glycopyrrolate, 2 mg.) and Robinul-PH Forte are double-strength dosage forms of glycopyrrolate. They are primarily cated for patients who are less responsive to anticholinergic therapy and for control of the more prominent symptomatology associated with e episodes of gastrointestinal disorders. Emphasis should be on total management, with due consideration of the various therapeutic modalities able, including diet, antacids, anticholinergic agents, sedatives, and attention to emotional problems. Accordingly, glycopyrrolate is recomded in the management of gastrointestinal disorders amenable to anticholinergic therapy, such as: (1) duodenal ulcer, duodenitis, pylorospasm; astric ulcer, gastritis, esophageal hiatal hernia, hyperchlorhydria, pyrosis, aerophagia, gastroenteritis; (3) esophagitis; (4) cholecystitis, chronic reatitis; (5) spastic and irritable colon, ulcerative colitis, functional bowel distress, diverticulitis, acute enteritis, diarrhea; and (6) splenic flexure rome, neurogenic gastrointestinal disturbances. When these conditions are associated with psychic overlay, the formulation with phenobarbital be indicated. ■ **CONTRAINDICATIONS** Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retenprostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH (glycopyrrolate with phenobarbital), sensitivity to phenobarbital. ■ **PRECAUTIONS** Administer with caution in the presence of incipient coma. ■ **SIDE EFFECTS** The most frequent side effect noted during clinical trials was dry mouth. Thirty-three (3.3%) of 1,009 patients receiving 32 mg. of glycopyrrolate a day complained of dry mouth of moderate to severe degree, but only 11 discontinued treatment because of this. ed vision, constipation, and urinary hesitancy have been reported infrequently. Other side effects associated with the use of anticholinergic s include: tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsi-, and rash. ■ **DOSAGE** The average and maximum recommended dose of Robinul Forte (glycopyrrolate, 2 mg.) or Robinul-PH Forte is one t three times daily (in the morning, early afternoon, and at bedtime). To obtain optimum results, dosage should be adjusted to the individual nt's response. After the more severe symptoms associated with acute conditions have subsided, the dose may be reduced to the minimum red to maintain symptomatic relief. ■ **SUPPLY** Robinul Forte (glycopyrrolate, 2 mg.) is available as scored, compressed pink tablets engraved '2 in bottles of 100 and 500. ■ Robinul-PH Forte (glycopyrrolate, 2 mg., with phenobarbital, 16.2 mg.) is available as scored, compressed blue ts engraved AHR/2 in bottles of 100 and 500.

A. H. Robins Company, Richmond, Va.

A·H·ROBINS



if skin is infected, or open to infection...

choose the topicals that give your patient–

- broad antibacterial activity against susceptible skin invaders
- low allergenic risk—prompt clinical response

Special Petrolatum Base

Neosporin® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

Vanishing Cream Base

Neosporin®-G Cream

(polymyxin B-neomycin-gramicidin)

Each gram contains: Aerosporin® brand polymyxin B sulfate, 10,000 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); gramicidin, 0.25 mg., in a smooth, white, water-washable vanishing cream base with a pH of approximately 5.0. Inactive ingredients: liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene polyoxypropylene compound, emulsifying wax, purified water, and 0.25% methylparaben as preservative.
In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. These products are contraindicated in those individuals who have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services Dept. PML.

Wellcome

Burroughs Wellcome C
Research Triangle Par
North Carolina 27709

Here are the latest health insurance facts

The following statistics on insurance coverage for health expense are from the Michigan Blue Shield publication, "Management Digest."

—88% of all Americans have some form of private health insurance.

— During 1969 (latest full year available) 175 million people spent $17 billion for their health insurance; they got back $14 billion in benefits.

— Hospital bill coverage is the most widespread form of health insurance. (All 88% of the insured have some hospital benefits.)

— 82% of all Americans also have some form of doctor bill protection. Such benefits came to $4 billion from Blue Shield, commercials and other programs, 31% of total health insurance dollars.

— Even with health insurance, the average person under 65 paid $100 out of pocket for health care. And the over-65 group, with Medicare meeting 43% of their expense and no coverage for dental care and drugs, paid $226 out of pocket on the average.

Michigan has four new CMAs

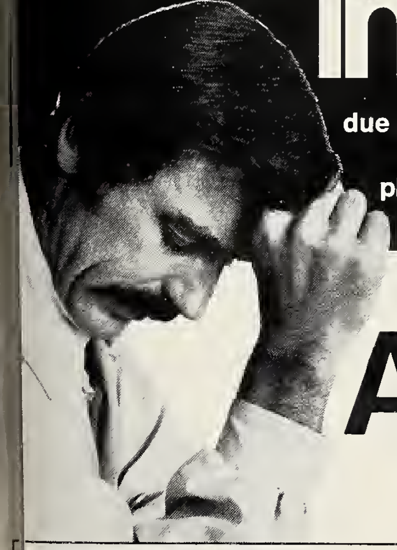
Four medical assistants from Michigan have achieved the status of certified medical assistant after passing a recent examination.

They are Barbara J. Baumgart, Centerline; Audrie W. Chute, Royal Oak; Patricia Donley, Grosse Pointe Farms, and Esther O. Hopkins, Detroit. They raise the total to 16 CMAs in the state.

The certification program was developed in 1961 and a record 169 medical assistants passed the examination nationally this year. They will be honored at a dinner Nov. 10 in Atlanta, Ga., at the annual convention of the American Association of Medical Assistants.

VD hotline in operation in Madison, Wis.

University medical authorities at the University of Wisconsin branch at Green Bay report that since June a VD hotline, which handles phone calls, gives out information, and makes referrals, all on a strictly confidential basis, has been serving area residents. The switchboard remains open from 6 p.m. to midnight. The project was entirely student organized and is staffed by students.



The treatment of

impotence

due to androgenic deficiency in the American male. The concept of chemotherapy plus the physician's psychological support is confirmed as effective therapy.

NEW CLINICAL STUDY

The Treatment of Impotence with Methyltestosterone Thyroid (100 patients—Double Blind Study)
T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the American Fertility Society

Android®
(thyroid-androgen) tablets

Double-Blind Study and Type of Patient: 100 patients suffering from impotence. Of the patients receiving the active medication (Android) a favourable response was seen in 78%. This compares with 40% on placebo. Although psychotherapy is indicated in patients suffering from functional impotence the concomitant role of chemotherapy (Android) cannot be disputed.

hoice of 4 strengths:

ndroid	**Android-HP**	**Android-X**	**Android-Plus**
	HIGH POTENCY	EXTRA HIGH POTENCY	WITH HIGH POTENCY B-COMPLEX AND VITAMIN C
ach yellow tablet contains:	*Each red tablet contains:*	*Each orange tablet contains:*	*Each white tablet contains:*
ethyl Testosterone . . 2.5 mg.	Methyl Testosterone . . 5.0 mg.	Methyl Testosterone . 12.5 mg.	Methyl Testosterone . . 2.5 mg.
yroid Ext. (1/6 gr.) . . 10 mg.	Thyroid Ext. (½ gr.) . . . 30 mg.	Thyroid Ext. (1 gr.) . . . . 64 mg.	Thyroid Ext. (¼ gr.) . . . 15 mg.
utamic Acid . . . . 50 mg.	Glutamic Acid . . . . 50 mg.	Glutamic Acid . . . . 50 mg.	Ascorbic Acid (Vit. C) . 250 mg.
iamine HCL . . . . 10 mg.	Thiamine HCL . . . . 10 mg.	Thiamine HCL . . . . 10 mg.	Thiamine HCL . . . . 25 mg.
			Glutamic Acid . . . . 100 mg.
			Pyridoxine HCL . . . . 5 mg.
			Niacinamide . . . . 75 mg.
			Calcium Pantothenate . 10 mg.
			Vitamin B-12 . . . . 2.5 mcg.
			Riboflavin . . . . 5 mg.
ose: 1 tablet 3 times daily.	*Dose:* 1 tablet 3 times daily.	*Dose:* 1 or 2 tablets daily.	*Dose:* 2 tablets daily.
vailable: ttles of 100, 500, 1000.	*Available:* Bottles of 100, 500, 1000.	*Available:* Bottles of 60, 500.	*Available:* Bottles of 60, 500.

REFER TO PDR

Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. Montesano, P., and Evangelista, I. Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. **2. Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964 **3. Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. **4. Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. **5. Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. **6. Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. **7. Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

e for literature and samples: BROWN **THE BROWN PHARMACEUTICAL CO., INC.** 2500 West 6th Street, Los Angeles, California 90057

SYNTHROID
T4

T_4 IS THE PREDICTABLE HORMONE BECAUSE IT LOVES PROTEIN.

SYNTHROID® (sodium levothyroxine) is pure synthetic T_4, the major circulating thyroid hormone. It is reliable to use because of its affinity for protein-binding sites in the blood. T_3 is more fickle. Sometimes it binds. Sometimes it doesn't. T_4 more *predictably* binds to protein.

Synthroid®
(sodium levothyroxine)

TEST	HYPOTHYROID	SYNTHROID THERAPEUTIC NORMAL
P.B.I.	Less than 4 mcg %	6-10 mcg %
T_4 By Column	Less than 3 mcg %	7-9 mcg %
T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

RADAR
AHEAD

ALL THYROID-FUNCTION TESTS ARE USEFUL IN MONITORING SYNTHROID THERAPY

No calculations are needed, test interpretation is simple.

Any of the commonly used T_4 thyroid function tests (P.B.I., T_4 By Column, Murphy-Pattee, Free Thyroxine) are useful in monitoring patients on T_4 because they *all* measure T_4. Patients on SYNTHROID are thereby easy to monitor because their results will fall within predictable, elevated test ranges. Of course, clinical assessment is the best criterion of the thyroid status of the drug-treated patient.

HISTORICAL
MARKER

TWO GOOD REASONS WHY THE ROAD TO NORMALIZED THYROID STATUS IS SO SMOOTH FOR THE SYNTHROID PATIENT.

(1) The onset of action of T_4 is gradual. It has a long in vivo "half-life" of over six days. (Occasional missed doses or accidental double-doses are of les concern because of this factor)[1]; (2) since SYNTHROID contains on T_4, the potential for metabolic surges traceable to more potent iodides (T_3) is eliminated.

AS WITH ANY THYROID PREPARATION, CAUTIOUS OBSERVATION OF THE PATIENT DURING THE BEGINNING OF THERAPY WILL ALER THE PHYSICIAN TO ANY UNTOWARD EFFECTS.

Side effects, when they do occur are related to excessive dosage. Caution should be exercised in administering the drug to patient with cardiovascular disease. Rea the accompanying prescribing information for additional data o write Flint Laboratories.

Choose the Smooth Road ...to thyroid replacement therapy

ATIENTS CAN BE UCCESSFULLY AINTAINED ON A RUG CONTAINING HYROXINE ALONE.

yroxine (T_4) is, as you know, major circulating hormone oduced by the thyroid gland. is also produced, in smaller ounts, and is active at the llular level. For years it has been orking hypothesis among docrinologists that T_4 is nverted by the body to T_3. In 0 this process, called iodination," was demonstrated Sterling and Braverman[2]. does convert to T_3, though the cise quantities are still being died.

he conversion has been ically demonstrated during the ninistration of T_4 to athyrotic ients. Their thyroid status is malized on SYNTHROID alone, the presence of T_3 in these ients has been clearly shown.

HE FACTS ARE LEAR AND HERE OUR OFFER.

CTS:

thetic thyroid drugs are an rovement over animal gland ducts. Patients, even athyrotic s, can be completely ntained on SYNTHROID (T_4) ne. Thyroid function tests are y to interpret since they are *dictably* elevated when the ent adheres to SYNTHROID. ll synthetic thyroid drugs, THROID is the most nomical to the patient.

WHY DOES SYNTHROID COST LESS THAN SYNTHETIC DRUGS CONTAINING T_3?

Very simple. T_3 costs more to make synthetically than does T_4. So it is economically necessary for a synthetic thyroid medication containing T_3 to cost more than one containing T_4 alone. Synthetic combinations cost patients nearly 50% more than SYNTHROID[4] because the T_3 costs more to start with; also there is the additional expense of formulating a tablet containing two active ingredients.

1. Latiolais, C. J., and Berry, C. C.: Misuse of Prescription Medications by Outpatients, *Drug Intelligence & Clin. Pharm.* 3:270-7, 1969.
2. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T4) to Triiodothyronine (T3) in Athyreotic Human Subjects, *J. Clin. Invest.* 49:855-64, 1970.
3. American Druggist BLUEBOOK, March, 1971.

A

OFFER:
Free TAB-MINDER medication dispensers to start or convert all your hypothyroid patients to SYNTHROID. Free information to physicians on role of thyroid function tests in a new booklet titled: "Guideposts to Thyroid Therapy." Ask us.

Name

Address

City State Zip

Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) **for Injection** is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC.
Morton Grove, Illinois 60053

U-M Galens Society Fund drive set for Dec. 3-4

Dec. 3 and 4 are the dates this year for the annual "Galens Tag Days" in Ann Arbor. Approximately 40 members of the Galens Honorary Society, junior and senior medical students at the University of Michigan, will be soliciting funds on those two days.

The money raised will help finance a Christmas party for children hospitalized at University Hospital during the holiday season, and will support the Galens Workshop in C. S. Mott Hospital at the university where regularly employed teachers organize activities throughout the year using books, records, games, toys, arts and crafts.

In addition, funds from the Tag Day drives help fulfill an $80,000, 10-year pledge to equip an intensive care unit in Mott Hospital. The drive has been carried on annually for 43 years to benefit children at the University Medical Center.

Beaumont Hospital engineer wins achievement contest

Health care personnel from 66 Michigan hospitals shared $5,000 in cash awards October 1 for their inventiveness in cutting costs and improving patient care. They are winners in the Thirteenth Annual Search for New Hospital Achievements, co-sponsored by the Michigan Hospital Association and Michigan Blue Cross. This year's 252 entrants added $1.6 million to the 13-year total of more than $18 million in savings to Michigan's hospital patients. To date there have been 3,313 entries in the contest which, with this year's entries, has paid out $60,000 in prize money in exchange for nearly $20 million in savings.

Top honors and $1,000 this year went to Kenneth J. Cook, an electronics engineer at Royal Oak's William Beaumont Hospital for his invention of an instrument to measure the performance of a defibrillator.

Specialized Service
IN
PROFESSIONAL LIABILITY INSURANCE
is a high mark of distinction
THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA
Professional Protection Exclusively since 1899

DETROIT OFFICE: R. K. Wind and J. K. Galloway, Representatives
27200 Lahser Road, Southfield 48076, Telephone: (Area Code 313) ELgin 3-4848 or 444-1439

GRAND RAPIDS OFFICE: G. J. Haworth, Representative
422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477

when an unnerving experience compounds the pain

the compound analgesic that calms instead of caffeinates

In addition to pain, this patient has experienced anxiety, fear, embarrassment, anger, and frustration. It's very likely that these psychic factors actually accentuated his perception of pain. Surely the last thing he needs is an analgesic containing caffeine. A much more logical choice is Phenaphen with Codeine. It provides a quarter grain of phenobarbital to take the nervous "edge" off, so the rest of the formula can control the pain more effectively. It's no accident that the Phenaphen formulations contain a sedative rather than a stimulant. Don't you agree, Doctor, that psychic overlay is an important factor in most of the accident cases you see?

Phenaphen® with Codeine

Phenaphen with Codeine Nos. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg. (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine phosphate, ¼ gr. (No. 2), ½ gr. (No. 3) or 1 gr. (No. 4) (warning: may be habit forming).

Indications: Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. *Contraindications:* Hypersensitivity to any of the components. *Precautions:* As with all phenacetin-containing products, excessive or prolonged use should be avoided. *Side effects:* Side effects are uncommon, although nausea, constipation and drowsiness may occur. *Dosage:* Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

A. H. Robins Company, Richmond, Va. **A·H·ROBINS**

'head clear upon arising'

For upper respiratory allergies and infections including the common cold, Dimetapp Extentabs® effectively relieve the stuffiness, drip and congestion all night and all day long on just one Extentab every 12 hours. For most patients drowsiness or overstimulation is unlikely.

prescribing information appears on next page

A·H·ROBINS

A. H. Robins Company
Richmond, Va. 23220

Dimetapp Extentabs®

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

Dimetapp Extentabs®

INDICATIONS: Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses, such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.
CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.
WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.
PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.
ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.
HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

County societies

Jackson doctors actively fighting for clean environment

The Jackson County Medical Society has a new Ecology Committee, formed to assist the community in solving health hazards through consultation and fact-finding.

The committee will ask the Jackson County Health Department and the Regional Health Planning Council to inform the committee on potential health hazards whenever they occur. Chairman is John Holst, MD.

"Dusty" Rhoades tells Macomb MDs of new GP trends

New Trends in General Practice were delineated at the October meeting of the Macomb County Medical Society. The speaker was F. P. Rhoades, MD, Detroit, past president of the American Academy of General Practice and now president of the American Geriatric Society.

Midland Society sponsors classes for expectant mothers

Expectant young mothers heard a series of weekly group discussions recently on pregnancy and delivery at the Midland Community Center. The sessions were part of the Young Mothers Program offered by the Visiting Nurse Association, March of Dimes, Family and Children's Service, Catholic Family Service, Midland Hospital, and the Midland County Medical Society.

The AMA supports every effort to solve health care problems

By Donald N. Sweeny, Jr., MD, Chairman
MSMS Delegation to AMA

Physicians should take every opportunity to set the record straight when the news media, when politicians, when friends contend that the AMA has a negative record on legislation.

Those old, worn-out charges are far from the truth.

The AMA record shows statements in support of health care proposals in 31 of 35 appearances in the 91st Congress and support in the present Congress for medical school expansion, increased financial aid to medical students, family practice training programs, and full funding for maternal and child care programs.

In no way, can the AMA be labeled as a negative force in Washington.

Bills supported by the AMA in the 91st Congress included appropriations for hospital and medical facilities construction, appropriations for medical education, drug abuse education and narcotic addict rehabilitation, vaccination assistance programs and regional medical programs.

The AMA opposed as unnecessary the proposed Commission on Marijuana; opposed one version of the Occupational Safety and Health Act of 1969 but supported another version in both the Senate and House; and opposed certain parts of the Social Security Amendments of 1970 while supporting other parts of the bill.

This affirmative legislative stance has been maintained in the present Congress, as many members of the Senate and House from both sides of the aisle will attest.

The AMA has introduced its own proposal for financing health care—Medicredit—which would provide government subsidized health insurance to the poor and insure against catastrophic medical costs.

"Medicredit is designed to end for all Americans the burden of expense, and to make all Americans truly equal in their access to all types of medical care," the AMA declares. The AMA has warned against the "panacea" approach of a massive government health program as recommended by Kennedy.

"We have learned that lesson in welfare and poverty," the AMA said. "Must we learn it anew with health care?"

The AMA's record on legislation was submitted as part of a 39-page statement filed by the organization with the Subcommittee on Administrative Practice and Procedure of the Senate Judiciary Committee. Subcommittee Chairman Sen. Edward M. Kennedy (D.-Mass.) had charged the AMA with maintaining a negative and obstructionist attitude toward proposals to improve health care in the United States during a summer hearing by the subcommittee.

Regarding specific charges leveled against the organization and doctors generally by Kennedy, the AMA statement termed them "out of date, out of context, and out of balance."

"And his conclusion, that doctors act primarily for gain, is outrageous," the AMA report stated.

Contrary to Kennedy's charges, the AMA noted, it does not and has not opposed vaccination programs, group practice, an increase in the number of doctors, private health insurance, government support for medical education, innovations in medical school curricula, equal opportunity in medical education or peer review.

The AMA statement to Senator Kennedy concluded:

"Let us set aside old, worn-out charges. Let us set aside emotional language and political opportunism. Let us, instead, seek together valid and workable solutions to the health care problems that confront us.

"The AMA will support every such effort."

The advertising in
MICHIGAN MEDICINE
keeps you informed
and helps pay the
publishing costs.

When the local
representative calls, Doctor,
tell him you saw
his company's ad
in your journal.

When doctors speak… Medicenter listens.

Medicenters are dedicated to the finest in sub-acute patient care for short term recovery from illness or injury. We recognize and practice the fact that each of our patients is under the supervision of his or her personal physician.

Based upon recommendations we've received from many physicians, we arrange and provide for easy transfer from hospital to Medicenter. We're conveniently located close to hospital complexes. Our forms and charts are thorough but simplified. We have a fully-equipped and staffed physical therapy department. Lab, X-ray and pharmacy services are available.

That's why we say "when doctors speak…Medicenter listens." May we hear from you?

MEDiCENTER
OF AMERICA
®

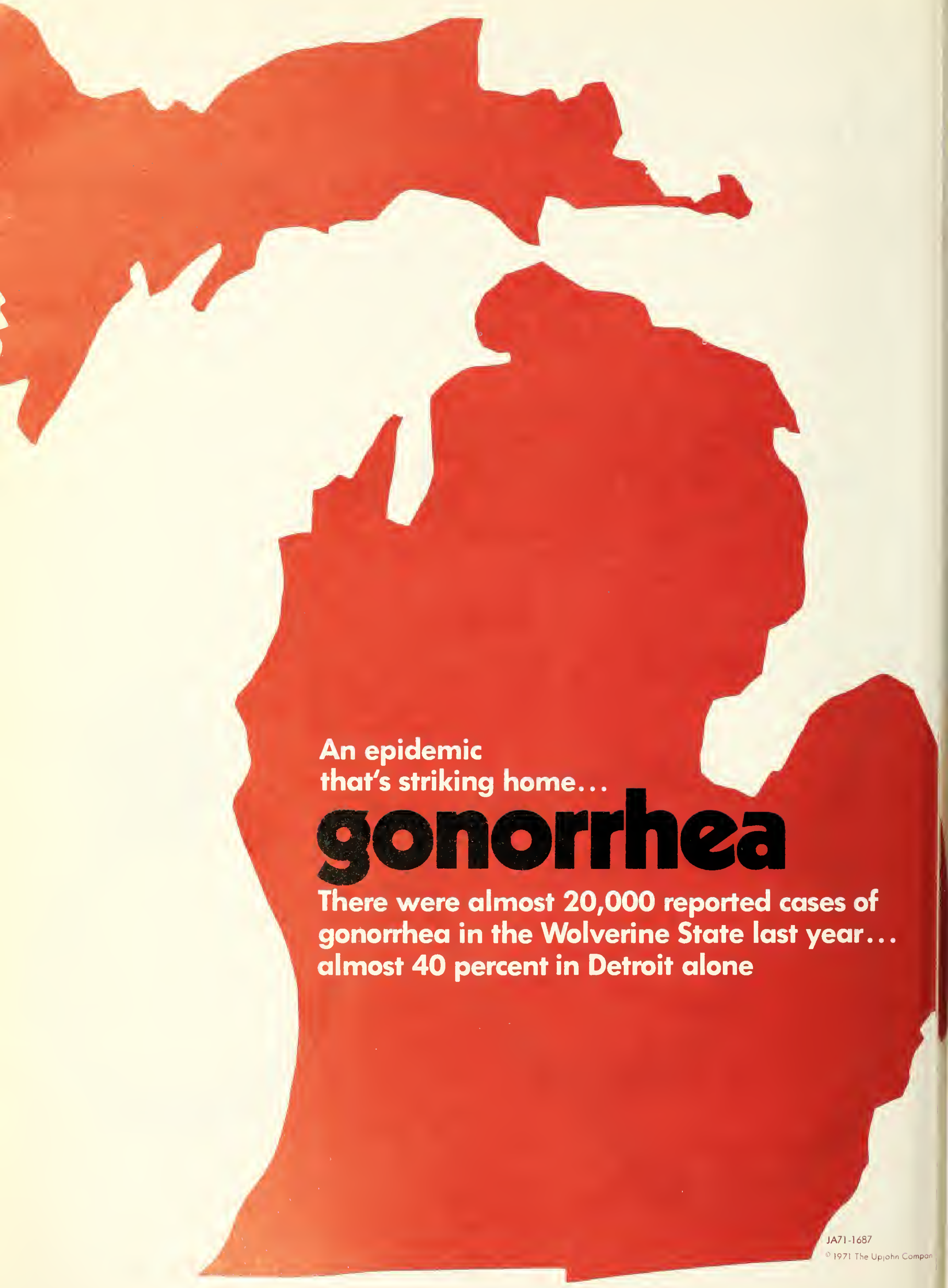
Medicenter of America

775 South Main Street
Chelsea, Michigan 48118

Doctors Park
Escanaba, Michigan 49829

420 West Fifth Street
Flint, Michigan 48503

22401 Winter Drive
Southfield, Michigan 48075



An epidemic
that's striking home...

gonorrhea

There were almost 20,000 reported cases of
gonorrhea in the Wolverine State last year...
almost 40 percent in Detroit alone

JA71-1687

© 1971 The Upjohn Compan

In Michigan . . . and everywhere else . . .
a new alternative

EW Trobicin® SPECTINOMYCIN DIHYDROCHLORIDE, PENTAHYDRATE, UPJOHN

single-dose treatment for intramuscular use only

a chemically distinct antibiotic indicated specifically
for treatment of acute gonorrhea:
in the male—acute urethritis and proctitis
in the female—acute cervicitis and proctitis
when due to susceptible strains of *N. gonorrhoeae*

High cure rate:[*] **96% of 571 males, 95% of 294 females**
(Dosages, sites of infection, and criteria
for diagnosis and cure are defined on page 3 of advertisement)

Assurance of a single-dose, physician-controlled treatment schedule

---

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

---

Active against most strains of Neisseria gonorrhoeae *in vitro*
(M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour
(average serum concentrations of 15 mcg/ml present 8 hours after dosing)

NOTE: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

For full prescribing information, including contraindications, warnings and precautions, please see last page of this advertisement.

[*] Data compiled from reports of 14 investigators.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Trobicin and the gonorrhea challenge

An accelerating epidemic—a decelerating susceptibility to penicillin

Gonorrhea is now the most prevalent reported communicable disease in the nation. The estimated number of new cases of gonorrhea in the United States exceeded two million for the first time in 1970. To compound the problems, strains of *N. gonorrhoeae* increasingly resistant to penicillin and other antibiotics are appearing throughout the country. Schedules of treatment which were effective only a few years ago now result in a significant percentage of treatment failure. *In vitro* studies have demonstrated that resistance of *N. gonorrhoeae* may also develop to Trobicin.

Thus, while aqueous Procaine Penicillin G remains the drug of choice for the majority of patients, the need for a non-penicillin, intramuscular antibiotic for acute gonorrhea in the male and female is abundantly clear. Such an antibiotic should be effective following a single intramuscular injection —and it should not demonstrate cross-resistance with penicillin

Trobicin—a new alternative specifically for the treatment of acute gonorrhea

Trobicin is indicated in the treatment of acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

High cure rates: 96% of 571 males, 95% of 294 females

No allergic reactions occurred in patients with an alleged history of penicillin hypersensitivity when treated with Trobicin, although penicillin antibody studies were not performed.

Chemically distinct

Trobicin is structurally not related to any other antibiotic commonly used to treat gonorrhea.

The assurance of a single-dose, physician-controlled treatment schedule

Intramuscular injections should be made deep into the upper outer quadrant of the gluteal muscle.

Adult male: Single 2 gram dose I.M. in acute gonorrhea urethritis. Single 4 gram dose I.M. (should be divided between two gluteal injection sites) in gonorrheal proctitis and in patients being re-treated after failure of previous antibiotic therapy. In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams intramuscularly is preferred.

Adult female: Single 4 gram dose I.M. (should be divided between two gluteal injection sites) in acute gonorrheal cervicitis and proctitis.

Safety for use in pregnancy has not been established, nor has safety for use in infants and children.

Clinical Results with Single-Dose Treatment, Intramuscularly*(Data compiled from reports of 14 investigators**)

	Dosage	Number of Patients	Number Cured	Percent Cured
Adult Males: Gonorrheal urethritis	**2 grams** **4 grams**	**475** **96**	**457** **93**	**96%** **97%**
Adult Females: Gonorrheal cervicitis	**4 grams**	**294**	**280**	**95%**

Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin medium in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluatable and were not included in the table above.

The following reactions were observed during the single dose clinical trials: soreness at the injection site, urticaria dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in norma human volunteers, the following were noted: a decrease in hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and mul tiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demon strated no consistent changes indicative of renal toxicity.

*4-gram doses were injected in two gluteal sites.

**Medical Research Files, The Upjohn Company

a chemically distinct antibiotic indicated specifically for treatment of acute gonorrheal urethritis and proctitis in males and cervicitis and proctitis in females when due to susceptible strains of *N. gonorrhoeae*

new Trobicin®

STERILE SPECTINOMYCIN DIHYDROCHLORIDE PENTAHYDRATE, UPJOHN

single-dose treatment for intramuscular use only

erile Trobicin®

ectinomycin dihydrochloride penta- drate)—For Intramuscular injection: gm vials containing 5 ml when reconsti- ed with diluent. 4 gm vials containing ml when reconstituted with diluent.

n aminocyclitol antibiotic active *in vitro* gainst most strains of *Neisseria gonor- oeae* (MIC 7.5 to 20 mcg/ml). Defini- e *in vitro* studies have shown no cross sistance of *N. gonorrhoeae* between obicin and penicillin.

dications: Acute gonorrheal urethri- and proctitis in the male and acute onorrheal cervicitis and proctitis in the male when due to susceptible strains *N. gonorrhoeae.*

ontraindications: Contraindicated in itients previously found hypersensitive Trobicin. Not indicated for the treat- ent of syphilis.

arnings: Antibiotics used to treat gon- rhea may mask or delay the symp- ms of incubating syphilis. Patients ould be carefully examined and onthly serological follow-up for at least months should be instituted if the diag- sis of syphilis is suspected.

fety for use in infants, children and egnant women has not been estab- hed.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae.*

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.

Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.

Female— single 4 gram dose (10 ml) intramuscularly.

How supplied: *Vials, 2 and 4 grams —with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9%* w/v. Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.

Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae.*

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.

For additional product information, see your Upjohn representative or consult the package insert. MED-B-1-S (LWB)

Upjohn

The Upjohn Company, Kalamazoo, Michigan 49001

In memoriam

Herbert C. Allison, MD
Grosse Pointe

Grosse Pointe physician, Herbert Charles Allison, MD, died Oct. 5 at the age of 80. Doctor Allison was on the staffs of Bon Secour, Cottage and Jennings hospitals.

A native of London, Ontario, Doctor Allison was graduated from Western University School of Medicine there. He was awarded the Military Cross by the Canadian Army Medical Corps during World War I. He belonged to the American Academy of General Practice, the American Geriatric Society and the Michigan Heart Association.

James H. Curts, MD
Saginaw

James Herbert Curts, MD, Saginaw ophthalmologist since 1937, died Sept. 12 at the age of 62.

Doctor Curts was a graduate of the University of Michigan Medical School. He was certified by the American Board of Ophthalmology, belonged to the American Academy of Ophthalmology and was a fellow of the American College of Surgeons.

He was on the staffs of Saginaw General, St. Mary's and St. Luke's hospitals in Saginaw.

Grayson F. Dashiell, MD
Detroit

Grayson F. Dashiell, MD, Detroit, a specialist in internal medicine, died July 5 at the age of 62. Doctor Dashiell, who had offices in Metropolitan Hospital, was a native of Nebraska and had formerly practiced in Illinois. He was graduated from the University of Chicago and received his medical degree from Creighton University, Omaha. He had lived in the Detroit area for 13 years and was a resident of Beverly Hills.

Doctor Dashiell was a former member of the Michigan State Medical Society.

Lawrence A. Drolett, MD
Lansing

Lawrence Alfred Drolett, MD, Lansing generalist, died Sept. 18 at the age of 62.

Doctor Drolett had been on the medical staff of Olin Memorial Health Center, Michigan State University, since closing his private practice in Lansing in 1966.

He was a graduate of Loyola University School of Medicine and had served on both the Lansing Board of Police and Fire Commissioners and the Waverly Fire and Police Committee. He was affiliated with St. Lawrence, E. W. Sparrow and Ingham Medical Hospitals.

Doctor Drolette was chairman many years of the MSMS Legal Affairs Committee and was active in MSMS efforts in the capitol. He also was Ingham County's delegate to the MSMS House of Delegates, and was chairman of the "outstate caucus."

Donovan F. Hinchman, MD
Livonia

Donovan F. Hinchman, MD, Livonia pediatrician for 12 years, died Oct. 2 at the age of 43.

Doctor Hinchman was graduated from the University of Michigan Medical School, and was affiliated with Saint Mary Hospital in Livonia.

Edward W. Kelly, Jr., MD
Detroit

Edward W. Kelly, Jr., MD, Detroit, an associate professor of dermatology at Wayne State University, died Sept. 18 at the age of 64. Doctor Kelly was a staff member of Children's Hospital of Michigan, Receiving Branch of Detroit General Hospital, and Hutzel Hospital.

Doctor Kelly, a native of Texas who came to Detroit in 1934, received his medical degree from Howard University in Washington.

He was a member of the Detroit Dermatological Society, the Society of Investigative Dermatology and the Academy of Dermatology. Doctor Kelly also held membership in the medical fraternity Sigma Xi.

E. Clarkson Long, MD
Detroit

Earl Clarkson Long, MD, Detroit, past president of the Michigan Academy of General Practice and an active MSMS member, died Sept. 18 at the age of 77.

Doctor Long, a Detroit general practitioner for 46 years, was a charter member and past executive secretary of the American Academy of General Practice. He was graduated from the University of Toronto Medical School.

Doctor Long had been a member of the Public Relations and Rheumatic Fever Control Committees of MSMS, and was former chairman of the Section on General Practice.

John VerMeulen, MD
Grand Rapids

John VerMeulen, MD, who practiced medicine 66 years before retiring in 1966, died Oct. 4 at the age of 94 years.

He was the last living member of the Detroit College of Medicine Class of 1900 and was a life member of the AMA and the Kent County Medical Society.

Samson S. Wittenberg, MD
Detroit

Detroit obstetrician-gynecologist Samson S. Wittenberg, MD, died Sept. 30 at the age of 71. He was a native of Montreal and a graduate of McGill University School of Medicine.

Doctor Wittenberg was assistant clinical professor of obstetrics and gynecology at Wayne State University, gynecologist for the Jewish Home for the Aged in Detroit, and a staff member at Northwest Grace and Detroit General hospitals.

Doctor Wittenberg was former chairman of the Wayne County Medical Society Maternal Mortality Committee and was a member of the American College of Obstetricians and Gynecologists, the American College of Surgery.

The *since 1932* **PM®** **Group**

PROFESSIONAL MANAGEMENT · FOR PHYSICIANS AND DENTISTS

Professional Management Offices
In These Cities .....

ANN ARBOR, BATTLE CREEK, BERKLEY, DETROIT,
FLINT, GRAND RAPIDS, KALAMAZOO, LANSING,
MUSKEGON, SAGINAW AND TRAVERSE CITY.

Black and Skaggs Associates
PM Systems, Incorporated

181 North Avenue PM BUILDING Battle Creek, Michigan 49017

Classified Advertising

$5.00 per insertion of 50 words or less, with an additional 10 cents per word in excess of 50.

Are you tired of the smog, traffic congestion, sociological problems, crime and other irritations which have become part of today's urban living? Well then DISCOVER WATERTOWN, WISCONSIN. Exchange all the big city unpleasantries for the peaceful environment and easy going pace of a residential city. Watertown, a progressive community is ideally located equi-distant between Milwaukee and Madison in Southeastern Wisconsin's lake district. The community has a trade (and medical practice) area serving 40-50,000 people. Many new schools, parks, trees and recreational opportunities. A stable economy. Our new Community Health Care Center with its beautiful 110-bed general hospital, connecting (but separate) 24-unit Medical-Dental Office Building (choice of suites still avilable), and connecting 130-bed Nursing Home, was completed in the Spring of 1971. WE URGENTLY NEED another Internist, an Otolaryngologist, an Ophthalmologist, Obstetrician-Gynecologists, and Family Practitioners to join existing medical staff. An immediate successful practice assured. Excellent rapport with the University of Wisconsin Medical School at Madison, and the Medical College of Wisconsin (formerly Marquette University School of Medicine) at Milwaukee. Medical Staff leading and supporting recruitment effort. Write or call Dr. Paul Glunz, Watertown Memorial Hospital, Watertown, Wisc. 53094. Telephone (404) 261-4210.

OPPORTUNITY for Internist or Family Physician to take over thirty year old practice in splendid location. Hospital privileges assured. Less than ten minutes drive to three local hospitals. Excellent hospital and office facilities in city of 125,000 population. Will introduce. Retiring. Reply Box #9, 120 W. Saginaw St., East Lansing, Mi 48823.

GENERAL PRACTITIONERS—Community of Mt. Pleasant, Michigan desirous of securing 4 general practitioners. Good hospital privileges available. 125 bed, fully accredited. Excellent consultants available in community. Mixed M.D., D.O. Staff. Active staff of 28 physicians. Community of 22,000. Site of Central Michigan University. 14,500 students. Four season area. Metropolitan areas within 50 miles. Service area of 75,000. Five G.P.'s in active practice. Community will assist actively in helping you get established. Call collect R. E. Pieratt, Adm. (517) 773-7941 or Frank Johnson, M.D., Chairman Recruitment Committee, area (517) 772-4846.

FOR SALE: Medical Equipment suitable for use by internist of F.M.D.: X-Ray, Diathermy, examining tables, treatment tables, instrument and supply cabinets, surgical instruments, cautery, centrifuge, office furniture, steel files and many other items. Will sell at appraised value. Reply Box #10, 120 West Saginaw St., East Lansing, Mi 48823.

WANTED: Internist, Board Certified or eligible. Present associate retiring Dec. 1. Established active practice, house staff and medical student teaching available if interested. Located in medical arts building adjacent to hospital, Lansing, Michigan. Reply: Box #8, 120 West Saginaw Street, East Lansing, Michigan 48823.

WINTER-SUMMER VACATIONLAND—Staff Physician or Internist. Interesting and challenging assignment, small progressive, affiliated hospital. Ideal location, easy access to metropolitan area. Competitive salary with increment schedule; leave policy 30 days vacation, 9 holidays, 15 sick days yearly; attractive retirement system credits military service; full scale fringe benefits. Licensure (any state) required. Equal opportunity employer. Call collect E. R. Cleveland, M.D., Chief of Staff, Area 517, 793-2450, Ext. 201, VA Hospital, Saginaw, Michigan.

PSYCHIATRIC RESIDENCIES—Excellent, approved psychiatric training; both demanding and clinically rich with a stimulating, well-balanced program. Affiliated with Michigan State University's College of Human Medicine. The setting is a culturally satisfying community; the serene, scenic Grand Traverse Bay area. Three year plan: $12,215 to $13,885; five year plan: $13,927 to $26,121. Contact Dr. Paul E. Kauffman, Director of Psychiatric Training, Room (165), Traverse City State Hospital, Traverse City, Michigan 49684. Phone (616) 947-5550. An equal opportunity employer.

PHYSICIAN 60, must curb activities. Seeks opportunity of four or five hours per day. Non-metropolitan area. Will consider institutional work, extra in busy office, student health small college, or non-medical allied field. Experience broad and in-depth. General practice, Emergency room, obstetrics and gynecology (College OB-GYN). Oriented in field psychosomatic medicine. References. Reply Box #7, 120 West Saginaw Street, East Lansing, Michigan 48823.

RADIOLOGIST Board Certified desires to practice in northern Michigan below the upper peninsula. Prefer solo practice but will consider all opportunities. Send replies to Box #6, 120 W. Saginaw Street, East Lansing, Michigan 48823.

PSYCHIATRIC RESIDENCY. Three years fully approved program in a large university affiliated general hospital. We provide closely supervised training in dynamic psychiatry, child psychiatry, medicolegal experience, and basic neurology. Salary to $15,000 plus benefits. For further details and consideration submit your resume to: Dr. Robert Schopbach, Director of Psychiatric Training, Henry Ford Hospital 2799 W. Grand Blvd., Detroit, Michigan 48202.

OUTPATIENT SERVICE STAFF PHYSICIAN with primary responsibility for examination of applicants to determine medical eligibility for hospitalization and other VA benefits. 216 bed modern general hospital with active medical and surgical services. Salary dependent upon qualifications. Excellent fringe benefits. Can pay moving expenses. License any state required. Equal opportunity employer. Contact Hospital Director, Veterans Administration Hospital, Fort Wayne, Indiana 46805, or call (219) 743-5431, Ext. 310.

Internist and General Practitioner urgently needed. Practice in community of Charlevoix, population 4,000. Modern, fully accredited hospital, 47 beds, CCU-ICU started. Serves population of 16,000. Office available, rent free until established. Nine member Medical Staff actively assisting in recruitment. Ideal area for really living without big city problems. Beyond compare for recreation year around. Two junior colleges close by. Excellent schools. Reply to: Administrator, Charlevoix Hospital, Charlevoix, Michigan 49720.

E. N. T. SOLO PRACTICE: Very active solo E. N. T. Practice in Downriver, suburban Detroit, available immediately due to accidental death. Building, Land, complete E. N. T. and office equipment with terms. Previous owner on staff of three hospitals, each within five minutes of office. Unrivaled opportunity to start now in a busy practice which is a going concern. Call (313) AV 5-4030.

CITY PHYSICIAN: for employment exam center and public health consultation. Attractive to physician who wants activity limited to a standard work week. Contact D. L. Sherman, Personnel Director, City Hall, Dearborn, Michigan 48126 (313) LU 4-1200.

Advertisers in MICHIGAN MEDICINE are friends of the profession. By accepting their advertising we show confidence in them, their services and products. They help make the journal a quality publication. Please familiarize yourself with their services and products and let them know that you see their advertising in MICHIGAN MEDICINE.

Con-
ven-
ience!

Dicarbosil®
ANTACID

Your ulcer patients and others will praise it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

ARCH LABORATORIES
319 South Fourth Street, St. Louis, Missouri 63102

INDEX TO ADVERTISERS

Arch Laboratories	1087
Battle Creek Sanitarium	1039
Beecham-Massengill	1042, 1043
Brighton Hospital	1060
Bristol Laboratories	1031
Brown Pharmaceuticals	1071
Burroughs-Wellcome & Co.	1041, 1070
Campbell Soup Co.	1019
Classified Advertising	1086, 1087
Fisher Building	1058
Fleet, C. B.	1029
Flint Labs	1072, 1073
Geigy Pharmaceuticals	988
Homemakers, Inc.	Cover III
Hospital Planning, Inc.	1039
Import Motors Limited, Inc.	1088
Lilly, Eli and Co.	996, 1067
Mead-Johnson	1046, 1047
Medical Protective Co.	1074
Medicenter of America	1079
Mercywood Hospital	1061
Merrell National	1023, 1024
Pharmacy Mgf. Association	1044
Poythress, Wm. P. & Co.	991
Professional Management	1085
Riker Laboratories, Inc.	1026, 1027
Robins, A. H. Co.	1068, 1069, 1075, 1076, 1077
Roche Laboratories	987, 1052, 1063, Cover II, Cover IV
Searle, G. D. & Co.	1020, 1021
Stratton, Ben P. Agency	1037
Stuart Pharmaceuticals	1022, 1050, 1051
Upjohn	1054, 1055, 1056, 1080, 1081, 1082, 1083
Walker Corp. & Co.	990, 1059
Wallace	1066
Warner-Chilcott	1034, 1035

Porsche Audi: a division of Volkswagen

"There is no such thing as the perfect car. There is only the perfect car for now. A car with all the latest proven engineering concepts and design ideas."

Dr. Ferry Porsche

Tom Sullivan Porsche Audi Co.
499 S. Hunter Blvd., Birmingham

Prestige Automobiles, Inc.
2955 S. Division Ave., Grand Rapids

Williams Porsche Audi
2924 E. Grand River Ave., Lansing

Wood Imports, Inc.
15415 Gratiot Ave., Detroit

Traverse Motors, Inc.
1301 Garfield Ave., Traverse City

Michigan Medicine
Breaking News: Deadline, Oct. 29
November 1971, Volume 70, Number 28
Michigan State Medical Society

Doctor Adler installed; Doctor Coury president-elect; Doctor Masters leads Council

The new officers of the Michigan State Medical Society for 1971-72 are:

President: Sidney Adler, MD, Detroit
President-elect: John J. Coury, MD, Port Huron
Speaker: Vernon V. Bass, MD, Saginaw
Vice-speaker: James D. Fryfogle, MD, Detroit
Council chairman: Brooker L. Masters, MD, Fremont
Council Vice-chairman: Robert M. Leitch, MD, Battle Creek

The new slate of officers began leadership of the medical society at the 1971 Annual Session in Grand Rapids, along with others who were selected to serve on The MSMS Council or in the MSMS delegation to the AMA House of Delegates.

Doctor Coury was elected in the House of Delegates' final session Oct. 5 in the Civic Auditorium. A general and pediatric surgeon, he is a member of the State Board of Registration in Medicine. He is an MSMS delegate to the American Medical Association, and has been a member of The MSMS Council for several years. Doctor Coury is a graduate of the Western Reserve University School of Medicine and has practiced in Port Huron since 1951.

Also at the final House session, the MSMS delegates re-elected Vernon V. Bass, MD, Saginaw, as their speaker and re-elected James D. Fryfogle, MD, Detroit, vice speaker.

Doctor Adler was installed at the presidential inauguration dinner Oct. 5 at the Pantlind Hotel. He succeeds Harold H. Hiscock, MD, Flint.

On Oct. 6, The MSMS Council elected its new officers. Chairman is Brooker L. Masters, MD, Fremont, who served as vice chairman during 1970-71. Robert M. Leitch, MD, Battle Creek, is new vice chairman. Heads of standing committees are Ernest P. Griffin, Jr., MD, Flint, Finance; Ralph R. Cooper, MD, Detroit, Scientific and Educational Affairs, and Robert C. Prophater, MD, Bay City, Legislative Policy.

Four delegates and four alternate delegates were chosen for two-year terms in the AMA House of Delegates. Returned as delegates were Robert E. Rice, MD, Greenville, and Otto K. Engelke, MD, Ann Arbor, while John W. Moses, MD, Detroit, and Paul T. Lahti, MD, Royal Oak, were newly elected as delegates.

New alternate delegates are Frank B. Walker, II, MD, Grosse Pointe; Donald T. Anderson, MD, Kingsford; Richard McMurray, MD, Flint, and Brooker L. Masters, MD, Fremont.

Continuing to serve another year as delegates are John J. Coury, MD, Port Huron; George W. Slagle, MD, Battle Creek; Donald N. Sweeny, Jr., MD, Detroit, and Joseph A. Witter, MD, Rochester.

Continuing as alternates are James C. Danforth, Jr., MD, Detroit; Marjorie Peebles-Meyers, MD, Detroit; Robert C. Prophater, MD, Bay City, and Vernon V. Bass, MD, Saginaw.

The MSMS House elected four new members of The Council. They are Louis R. Zako, MD, Allen Park, First District; James H. Tisdel, MD, Port Huron, Seventh District; William A. DeYoung, MD, Saginaw, Eighth District, and Raymond Hockstad, MD, Escanaba, Twelfth District.

Returned as councilors were Robert C. Prophater, MD, Bay City, and Sydney Scher, MD, Mt. Clemens.

Harold H. Hiscock, MD, Flint, right, outgoing MSMS president, escorts newly-named MSMS President-elect John J. Coury, MD, Port Huron, to the speaker's podium before the MSMS House of Delegates.

Eugene R. Elzinga, MD, Marquette

Tommy N. Evans, MD, Detroit

John V. Fopeano, MD, Kalamazoo

All presentations made by Kenneth Johnson, MD, Lansing, MSMS secretary

MSMS bestows highest award on six physicians

Certificates of Commendation were presented by the MSMS House of Delegates in Grand Rapids Oct. 5 to six distinguished Michigan physicians.

Selected this year are Eugene R. Elzinga, MD, Marquette; John V. Fopeano, MD, Kalamazoo; Leland E. Holly, Sr., MD, Muskegon, and three from Detroit, Tommy N. Evans, MD, Lionel F. Swan, MD, and James M. Kennary, Sr., MD.

"In recognition of an outstanding career in orthopedic surgery and his unselfish service to the crippled children in the Upper Peninsula for 37 years" is the language of the citation to Doctor Elzinga.

A Zeeland native, he was graduated from the University of Michigan Medical School and practiced for 10 years in Flint before moving to Marquette in 1934. For the first 15 years of his practice there he was the only orthopedic specialist in the Upper Peninsula. He is a former member of The MSMS Council.

Doctor Fopeano was cited for his civic contributions to the city of Kalamazoo as well as his "outstanding" career in internal medicine. Although he retired from his active practice in 1969, after 38 years, he continues to serve as director of Out-Patient Clinics at Kalamazoo's Borgess Hospital and is active in the Kalamazoo Mental Health Center and other community groups. He was honored last February by the Kalamazoo Academy of Medicine as "Kalamazoo's Senior Medical Statesman."

Doctor Fopeano was born in Hoboken, N.J., and was graduated from the University of Michigan Medical School.

Doctor Evans, who is acting dean of the Wayne State University School of Medicine, was lauded for taking a key role in new developments in medical education and facilities, including the Detroit Medical Center.

A native of Arkansas who received his medical education at Vanderbilt University, Acting Dean Evans is a specialist in obstetrics and gynecology and has devoted most of his professional career to education. He also has national prominence as an author.

Doctor Holly was honored for his "outstanding career as a radiologist; as an influential leader in school and community affairs in Muskegon; as a dedicated leader in cancer control efforts, and

Leland E. Holly, Sr., MD, Muskegon

as a proven leader in medical and health organizations."

Doctor Holly's colleagues cite his tireless efforts in providing radiological services to a wide range of institutions. He was honored by the American Cancer Society in 1957 as "Man of the Year" for his distinguished service to cancer control.

Doctor Kennary, a family physician in his native city of Detroit for more than 40 years, was cited for "his inspiring work with laryngectomy patients" as well as his professional contributions.

Doctor Kennary himself underwent laryngectomy, removal of the larynx, in 1946, and resumed his full medical practice after recuperation. Over the last 25 years, he has devoted himself to patients facing the same kind of surgery or preparing to return to active lives after such operations. He received his medical education at St. Louis University. He is a member of the MSMS House of Delegates.

Doctor Swan, an outstanding black medical leader in Michigan and the nation, was commended in particular for "his courageous efforts to improve medical care in the Detroit inner city."

The Detroit Medical and Surgical Center, which opened in June, is one of the projects in which he has been active. Doctor Swan was born in Trinidad, British West Indies, was educated at the Howard University College of Medicine and practiced in Birmingham, Ala., for 18 years before establishing his general practice in Detroit in 1951. The MSMS award is the most recent of many to be bestowed on Dr. Swan.

The MSMS awards program was established in 1961 to honor distinguished contributions by physicians of either a scientific or public service nature and to point up the kinds of contributions being made by medical practitioners in Michigan. Donald Finlayson, MD, Sault Ste. Marie, was chairman this year of the Certificates of Commendation Committee.

James M. Kennary, Sr., MD, Detroit

Lionel F. Swan, MD, Detroit

Judicial Commission balloting to end December 1

The deadline is Dec. 1 for returning completed ballots in the fall, 1971 elections to the MSMS Judicial Commission.

The ballots were mailed early this month to voting MSMS members in Districts 1, 2, and 3. Physicians nominated are:

District 1—Thomas M. Flake, MD; Eugene L. Freitas, MD, incumbent; Gerald H. Mandell, MD, and Donald N. Sweeny, Jr., MD, all of Detroit. There are two vacancies.

District 2—Edmund J. Dudzinski, MD, Mt. Clemens; Robert J. Mason, MD, Birmingham (incumbent Harold A. Furlong, MD, Pontiac, declined to run).

District 3—Justin L. Sleight, MD, Lansing; R. Wallace Teed, MD, Ann Arbor, incumbent.

Special insert on following pages presents new VD diagnosing service

Physicians throughout Michigan are being asked to look anew at efforts to control venereal disease during a special project of the Michigan State Medical Society and the Michigan Department of Public Health.

On Jan. 1, 1972, the state department will make available generally a new service for diagnosing gonorrhea, utilizing the Transgrow medium.

After January 1, supplies for use of Transgrow procedures and laboratory diagnostic processing will be provided without charge to all physicians in Michigan by the MDPH in Lansing.

The following four pages of *Michigan Medicine* are devoted to the newly-recommended diagnostic procedure for gonorrhea and recommended schedules for venereal disease treatment. Reprints of these pages are available from MSMS on request.

Focus of attention in Michigan on problems of venereal disease control coincides with the American Medical Association's 1971 Community Health Week efforts in the same area.

"Again this year, we are witnessing a rise in venereal disease in Michigan, with the greatest increase in incidence in gonorrhea. In 1970, more than 20,000 new cases of gonorrhea were reported, an increase of almost 17 per cent over 1969 and more than double the total in 1960," according to Maurice S. Reizen, MD, director, Michigan Department of Public Health, and Louis R. Zako, MD, chairman, Committee on Public Health, Michigan State Medical Society.

"We believe that it is possible to reverse the current trends in venereal disease morbidity," they say. "Practicing physicians utilizing the techniques of diagnosis and adequate treatment schedules can be of utmost importance in controlling the venereal diseases."

In the joint project, the 12 counties with largest numbers of reported gonorrhea cases in 1970 are being made particular targets. Special information kits are being sent to hospitals and medical society presidents in these counties: Wayne, Genesee, Kent, Oakland, Ingham, Kalamazoo, Washtenaw, Muskegon, Calhoun, Saginaw, Berrien and St. Clair.

Public education efforts will include distribution of brochures and pamphlets to youth serving organizations and institutions and a public information program on the dangers of untreated venereal disease. Materials developed by the AMA and directed toward 19 to 24 year olds, the age group with the greatest VD incidence, are being used in the project.

The symbol of authority passes to Brooker L. Masters, MD, Fremont, center, new MSMS Council chairman. Ross V. Taylor, MD, Jackson, right, is outgoing Council chairman, while Robert M. Leitch, MD, Battle Creek, left, is new vice chairman of The Council.

Search for best health careers poster again underway

The third annual student Health Careers Poster Contest sponsored by the Michigan Health Council and MSMS is underway now until March 1. Purpose of the contest is to stimulate a greater awareness of, and interest in, health careers.

State winners in the contest will be announced April 1. They will then be eligible for the national contest sponsored by the American Hospital Association Division of Careers and Recruitment. National winners will be announced during National Hospital Week, May 7-13.

The contest is open to 6th through 9th grade students in the junior division, and 10th through 12th grade students in the senior division. Cash awards will be given on both the state and national levels.

Criteria and techniques for the diagnosis of Gonorrhea

Criteria

Women

Recommended

1. To diagnose gonorrhea in women, culture specimens should be obtained from the cervix and the anal canal and inoculated on separate Thayer-Martin (TM) culture plates or in separate Transgrow bottles. The combination of a positive oxidase reaction of colonies and Gram-negative diplococci grown on either medium provides sufficient criteria for a diagnosis of gonorrhea.

2. For test-of-cure, culture specimens should be obtained from both the cervix and the anal canal, inoculated on either TM or Transgrow medium, and interpreted according to the combination of criteria presented in item 1.

Not Recommended

1. Gram-stained or fluorescent antibody stained smears are not recommended for the diagnosis of gonorrhea in women except as an adjunct to the cultures.

2. The delayed fluorescent antibody technique is not recommended for the diagnosis of gonorrhea.

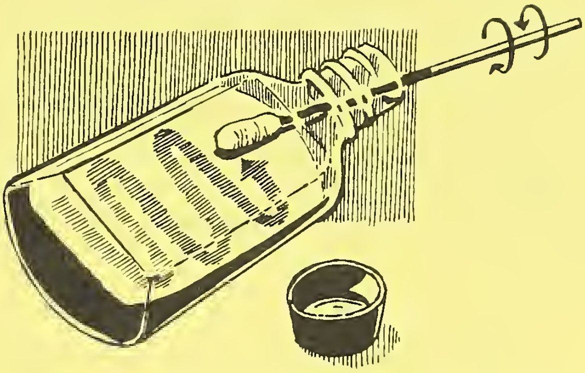
3. Neither fluorescent antibody stained smears nor the delayed fluorescent antibody procedure is recommended as a test-of-cure in women.

Men

Recommended

1. Microscopic demonstration of Gram-negative, intracellular diplococci on smear of a urethral exudate constitutes sufficient basis for a diagnosis of gonorrhea. Prepare smear by rolling swab on slide; do not rub swab on slide because microscopic morphology will be distorted.

2. When Gram-negative diplococci cannot be identified on direct smear of a urethal exudate, a culture specimen should be obtained from the anterior urethra and inoculated on Thayer-Martin (TM) or Transgrow medium. The combination of a positive oxidase reaction of colonies and Gram-negative diplococci grown on either medium provides sufficient criteria for a diagnosis of gonorrhea.



3. When a test-of-cure or a test for incubating gonorrhea is needed, a culture specimen should be obtained from the anterior urethra and placed on either medium; the culture should be interpreted according to the combination of criteria presented in item 2.

4. In homosexuals, an additional culture specimen should be obtained from the anal canal and pharynx, inoculated on TM or Transgrow medium, and interpreted as in item 2.

Not Recommended

1. Fluorescent antibody staining of smears of urethral exudates is not recommended to diagnose gonorrhea.

2. Fluorescent antibody staining of urethral exudates or the delayed fluorescent antibody procedure should not be used as a test-of-cure.

Special Situations

1. In special social, medicolegal, and research situations when specific identification of organisms isolated on either TM or Transgrow medium from the pharyngeal or anogenital region is desired, fermentation reactions should be used to confirm an identification of *Neisseria gonorrhoeae*. Fluorescent antibody staining can be used as a confirmatory tool for organisms isolated on either medium if insufficient isolated colonies of suspected gonococci are available for inoculation of fermentation medium or if the organisms are no longer viable.

2. Culture on TM medium is the diagnostic procedure of choice in special situations such as suspected gonococcal conjunctivitis, arthritis, or septicemia. Identification of *N. gonorrhoeae* should be confirmed as described in item 1 (Special Situations).

3. Gram staining and fluorescent antibody staining of smears from conjunctivae, joint fluids, or skin lesions can be used as an adjunct in the diagnosis of these manifestations of gonorrhea, particularly when partial therapy may prevent cultural recovery of organisms. (Fluorescent antibody conjugates are check tested for specificity by the Venereal Disease Research Laboratory for use only in a confirmatory test for organisms grown on selective media, and not for staining of direct smears.)

Techniques

I. Obtain Culture Specimen

Women

1. *Cervical Culture*—the best site to culture.

a. Moisten speculum with warm water; do NOT use any other lubricant.

b. Remove cervical mucus, preferably with a cotton ball held in ring forceps.

c. Insert sterile cotton-tipped swab into endocervical canal; move from side to side; allow several seconds for absorption of organisms to the swab.

2. *Anal Canal Culture* (also called "rectal culture")—most likely site to be positive when cervix is negative.

Note: This specimen can easily be obtained after the cervical specimen without changing patient's position and without using anoscope.

a. Insert sterile, cotton-tipped swab approximately one inch into the anal canal. (If swab is inadvertently pushed into feces, use another swab to obtain specimen.)

b. Move swab from side to side in the anal canal to sample crypts; allow several seconds for absorption of organisms to the swab.

3. *Urethral or Vaginal Cultures*—indicated when the cervical culture is unsatisfactory; e.g., hysterectomy patients and children; or added when maximal sensitivity is desired such as in special social, research, or medicolegal situations.

Urethral

a. Strip the urethra toward the orifice to express exudate.

b. Use sterile loop (less painful) or cotton swab to obtain specimen.

Vaginal

a. Use speculum to obtain specimen from the the posterior vaginal vault, or obtain specimen from the vaginal orifice if the hymen is intact.

Men

1. *Urethral Culture*—indicated when Gram stain of urethral exudate is not positive, in tests-of-cure, or as test for incubating gonorrhea.

a. Use sterile bacteriological wire loop to obtain specimen from anterior urethra by gently scraping the mucosa.

2. *Anal Canal Culture*—These can be taken in the same manner as for women.

II. Inoculate Thayer-Martin Medium or Transgrow Medium

Thayer-Martin Plates

A. Roll swab directly on Thayer-Martin (TM) medium in a large "Z" pattern to provide adequate exposure of swab to plate for transfer of organisms. Less desirable alternative: Place swab in holding medium and refrigerate until plating.

B. Cross-streak immediately with a sterile wire loop, preferably in the clinic. If not done previously, cross-streaking should be done in the laboratory.

C. Place culture in a candle jar as soon as possible.

D. Begin incubation of plates the same day.

Transgrow Bottles

A. Inoculate specimens on the surface of Transgrow medium as follows:

Caution: Keep neck of bottle in elevated position to minimize CO_2 loss.

1. Remove cap of bottle only when ready to inoculate medium.

2. Soak up all excess moisture in bottle with specimen swab and then roll swab from side to side across medium, starting at the bottom of the bottle.

B. When possible, incubate the Transgrow bottle in an upright position at 35-37° C for 16-18 hours before mailing and note this on accompanying request form. Resultant growth survives prolonged transport and is ready for identification upon arrival at the laboratory.

C. Package the capped Transgrow bottle and request form in a suitable container to prevent breakage and immediately transport to a central bacteriologic laboratory by postal service or other convenient means.

D. At the laboratory, preincubated Transgrow bottles will be examined immediately for *N. gon-*

orrhoeae; other bottles will be incubated at 35-37° C for 24-48 hours and examined.

Special Considerations

Preliminary evaluation indicates storage life of Transgrow medium at room temperature may be in excess of three months.

Many physicians and laboratories are starting to use this new Transgrow medium; however, some unsatisfactory results may be obtained unless physicians use good techniques in obtaining and inoculating specimens and until the microbiologists become familiar with this new culture procedure, i.e., colony morphology may be atypical on Transgrow medium.

General Considerations

Transgrow, a selective medium for the transport and cultivation of *N. gonorrhoeae,* is used for sending specimens to a central laboratory; on the other hand, TM plates are used when there is immediate access to a laboratory. Transgrow medium under 10% CO_2 atmosphere in bottles promotes growth of pathogenic *Neisseria* and suppresses contaminating organisms similarly to Thayer-Martin medium in plates. Transgrow medium maintains viability of pathogenic *Neisseria* for more than 48 hours at room temperature. Validity of culture results depends on proper techniques for obtaining, inoculating, and handling specimens.

* * *

Recommended Treatment Schedules

Michigan Department of Public Health
Division of Communicable Disease Control

Gonorrhea

Although some isolates of *Neisseria gonorrhoeae* have decreased susceptibility to penicillin, this resistance is relative, not absolute, and penicillin in large doses remains the drug of choice. Physicians are cautioned not to use less than recommended doses.

Recommended Treatment Schedules

Uncomplicated gonorrhea in men: aqueous procaine penicillin G, 2,400,000 units in one intramuscular injection.

Uncomplicated gonorrhea in women: aqueous procaine penicillin G, 4,800,000 units intramuscularly divided in two injection sites at one visit.

Patients with a known exposure to diagnosed gonorrhea should receive prophylactic or epidemiologic treatment. Prophylactic treatment of gonorrhea (male or female) is accomplished with the same treatment schedules as for uncomplicated gonorrhea.

Penicillin Sensitivity

Gonorrhea patients sensitive to penicillin may be treated effectively with tetracycline, administered as an initial oral dose of 1.5 grams followed by 0.5 grams every 6 hours for 4 days, a total dosage of 9 grams.

Retreatment and Complications

Test of cure procedures are recommended at approximately 5-7 days after therapy. In the male, a gram stained smear is adequate if positive; otherwise, a culture specimen should be obtained from the anterior urethra. In the female, culture specimens should be obtained from both the endocervical and anal canal sites.

Retreatment in the male is indicated if the urethral discharge persists for three or more days following initial therapy and the smear or culture remains positive. Follow-up treatment consists of 4,800,000 units of aqueous procaine penicillin G intramuscularly divided in two injection sites at a single visit.

In uncomplicated gonorrhea in the female, retreatment is indicated if follow-up cervical or rectal cultures remain positive for *N. gonorrhoeae.* Follow-up treatment consists of 4,800,000 units of aqueous procaine penicillin G daily on two successive days.

Treatment of severe complications of gonorrhea should be individualized using large amounts of short-acting penicillin.

Serologic Tests for Syphilis

All patients treated for gonorrhea should have a serologic test for syphilis at the time of treatment. Patients receiving the recommended penicillin schedules need not have follow-up serologic tests for syphilis.

Patients treated with tetracycline or other alternate antibiotics should have a follow-up serologic test each month for 4 months to detect syphilis that may have been masked by gonorrheal therapy.

Gonorrhea patients who concomitantly have syphilis should be given full therapy appropriate to the stage of syphilis in addition to the above recommended treatment for gonorrhea.

While long-acting forms of penicillin (such as benzathine penicillin G) are ideal in syphilotherapy, they are not indicated in routine gonorrhea treatment.

Syphilis

Primary, Secondary Syphilis

Rx: Benzathine penicillin G—2.4 million units total (1.2 million units in each buttock) by intramuscular injection.
or: PAM—4.8 million units total usually given 2.4 million units at first session, as above, and 1.2 million units at each of two subsequent injections 3 days apart.
or: Aqueous procaine penicillin G—600,000 units daily for 8 days to total 4.8 million units.

Latent Syphilis

Rx: Benzathine penicillin G—If no spinal fluid examination is done, treatment must encompass the possibility of asymptomatic neurosyphilis. In this case, 6.0=9.0 million units total, given 3.0 million units (1.5 in each buttock each session) at 7-day intervals.
With nonreactive spinal fluid examination, 2.4 million units (as primary).
or: PAM—Same as primary syphilis.
or: Aqueous penicillin G—Same as primary syphilis.

Congenital Syphilis

Rx: Benzathine penicillin G—50,000 units per kilogram of body weight at one clinic visit.*
or: Aqueous Procaine Penicillin G—100,000 units per kilogram of body weight divided into daily dosage over 10-day period.*

Late Syphilis

Asymptomatic neurosyphilis
Symptomatic neurosyphilis
Cardiovascular syphilis
Late benign (cutaneous, osseous, and visceral gumma) syphilis

Rx: Benzathine penicillin G—6.0 to 9.0 million units total, given 3.0 million units at 7-day intervals.
or: PAM—6.0-9.0 million units total, given 1.2 million units at 3-day intervals.
or: Aqueous procaine penicillin G—6.0 to 9.0 million units total, given 600,000 units daily.

Any benefit from more than 10 million units has not been demonstrated.

Syphilis in Pregnancy

Syphilis in pregnancy should be managed in the same manner as with any non-pregnant patient. Urgency of treatment is the keynote to therapy.

Alternate Antibiotics

When sensitivity precludes use of penicillin, erythromycin and tetracycline are the best alternate drugs. Recommended dosage orally is 30-40 gms. of erythromycin or 30-40 gms. of tetracycline given over a period of 10-15 days. Treatment with such alternate antibiotics must be accompanied by close follow-up of the syphilitic patient since none of these drugs has had adequate evaluation in all stages of syphilis. Spinal fluid examinations must be done as part of follow-up after this type of therapy.

Preventive Treatment

If the patient is known to have been exposed to lesion syphilis, it is a fallacy to wait for the disease to develop to the clinical or reactive serologic stage, meanwhile allowing reinfection of treated patients and the infection of additional persons. However, every effort should be made to arrive at a diagnosis, including a complete physical examination, before administering preventive treatment.

Adequate preventive treatment may consist of 2.4 million units of benzathine penicillin G.

*Total dosage not to exceed 5.0-6.0 million units.

Source: Public Health Service

Note: Transgrow medium and diagnostic service will be available generally to Michigan physicians without charge from the State Department of Public Health after January 1, 1972. Requests and inquiries may be addressed to State of Michigan, Department of Public Health, 3500 N. Logan, Lansing, Mich. 48914.

MEDICAL CENTER LIBRARY
DEC 3 1971

MEDIGRAMS

ATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

Michigan Medicine

November 19, 1971, Volume 70, Number 29
Michigan State Medical Society
Reading Time: 2 Mins. 30 Seconds

PRING SESSION of the MSMS House of Delegates has been set for Monday and uesday, March 20-21, 1972. Arrangements have been made at the Detroit ilton Hotel. Speaker Vernon V. Bass, MD, discussed his plans with the SMS Council at its regular meeting Nov. 10.

NOTICE . . . The Michigan State Board of Registration in Medicine has stated: "The annual re-registration fee for 1972, which is required before Jan.1, 1972, will be $5. This office does not plan to send any additional notification to the registered physicians in the state." Attorney General Frank Kelly has ruled the $25 re-registration fee enacted by the 1971 Legislature does not take effect until 1973.

SMS DELEGATES soon will receive a revised version of the proposed bylaws or an MSMS Peer Review organization.

The MSMS House in September suggested changes in seven areas which ere incorporated in the sixth draft of the bylaws which went to The Council ov. 10. The Council made further amendments. The new version will be ailed to all delegates for their comments. The Council then will incororate those changes and send a final draft to the delegates in 1972 for onsideration at the March interim meeting of the House.

THE LEGISLATURE has sent to Governor Milliken for his signature legislation lowering the blood alcohol content index of intoxication from .15 per cent to .10 per cent, and lowering the index for "presumption of impaired driving" from .10 to .07 per cent. MSMS supported the legislation.

HB4902, adopted last week, would for the first time permit physicians to serve on the boards of county hospitals established under Act 350 of the Public Acts of 1913. The act strikes the ban on physicians serving on the hospital boards, and declares that three of nine hospital trustees may be physicians. The bill coincides with objectives of Resolution 29 adopted by the MSMS House of Delegates in October.

SMS MEMBERS will receive dues statements for county, state, and AMA on bout Dec. 15. MDPAC dues will be listed again as an option.

THE MSMS COUNCIL, on Nov. 10, authorized Johnson and Higgins, Inc., a national insurance brokerage firm, to investigate on an exclusive basis a possible professional liability insurance program for consideration by MSMS. This authority is for 180 days and MSMS will not consult with any other broker or agent during this period.

O MAJOR REVISIONS were made in the 1972 budget for MSMS as recommended y the Finance Committee, Ernest P. Griffin, MD, chairman, and approved y The Council Nov. 10. The budget is substantially the same as 1971, ith annual budgeted expenses up 6.7% and income up 2%.

MICHIGAN HEALTH COUNCIL on Nov. 11 elected Robert E. Rice, MD, of Greenville, as president-elect. William Hennessy, RPh, Detroit, was installed as the new president.

A NEW WORKSHOP for Presidents-Elect of Component Medical Societies will be held at the MSMS Headquarters on Thursday afternoon, Dec. 9. The incoming county presidents will be briefed on 1) their upcoming responsibilities, 2) MSMS procedures and major issues, and 3) they will have ample opportunity to ask questions and meet the officers and staff.

ENDING THEIR SERVICE as members of the Michigan delegation to the AMA in New Orleans Nov. 28-Dec. 1 will be Delegates John R. Heidenreich, MD, Daggett, and Luther R. Leader, MD, Royal Oak; and Alternates Harold A. Furlong, MD, Pontiac, and Bradley M. Harris, MD, Ypsilanti.

GOVERNOR MILLIKEN has nominated two members of the Michigan Board of Registration in Medicine for reappointment and three others for appointment to the Board for terms expiring in 1975. Reappointed are C. Allen Payne, MD, Grand Rapids, current president of the Board, and Irvin J. Kurtz, MD, Southfield. New appointments are Donald T. Anderson, MD, Kingsford, succeeding William Huron, MD, Iron Mountain; Joseph J. Berke, MD, Grosse Pointe, succeeding Don McLean, MD, Lathrop Village; and John R. Wilson, MD, Grand Rapids, succeeding Gilbert Saltonstall, MD, Charlevoix. Appointments require Senate confirmation.

AS PART OF AN ONGOING effort of the MSMS Communications Department to work more closely with the press and to correct misinformation whenever it appears, MSMS Council Chairman Masters sent details about the MSMS efforts t have the three medical schools enlarged to Detroit Free Press Columnist Judd Arnett on Nov. 15 after a column by Mr. Arnett on Nov. 12 discussed the doctor shortage. Doctor Masters lauded Columnist Arnett for his conce and asked for an appointment so MSMS and WCMS leaders could describe the many attempts to increase the number of Michigan doctors and to improve medical care.

TWO PHYSICIANS HAVE been appointed to serve on the Legislative Study Committee on General Practice, established by the legislature. Brooker L. Masters, MD, Fremont family physician and MSMS Council chairman, will represent MSMS and James F. Dooley, MD, Flint GP and immediate past president of the Michigan Academy of Family Practice, will represent the Academy. Rep. Stempien, Democratic floor leader, introduced the resolution creating the study committee which will seek means of adding family physicians in Michigan.

ADMINISTRATIVE DETAILS are being worked out for Michigan Blue Cross-Blue Shield to absorb the Community Health Association on January 1. The CHA delegates approved the agreement on Nov. 6.

Second Class Postage Paid at East Lansing, Mich.
and at additional mailing offices.

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1971 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

UNIVERSITY OF CAL
LIBRARY SCH OF MED
THIRD & PARNASSUS AVE
SAN FRANCISCO CAL 94122

MEDIGRAMS

LATE NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

MEDICAL CENTER LIBRARY

DEC 16 1971

Michigan Medicine

November 30, 1971, Volume 70, Number 30
Michigan State Medical Society
Reading Time: 2 Mins. 15 Seconds

FORTY-SIX LEGISLATORS JOINED to co-sponsor House Bill 5767, the proposed revised Medical Practice Act, in the Michigan House of Representatives this week. Chief sponsor is Rep. Mrs. Josephine Hunsinger, Detroit Democrat, and first Republican sponsor is Rep. Peter Kok, Grand Rapids. Main provisions of the bill are (1) rewrite and reorganize the medical practice act which first was written in 1899, (2) provide for a citizen-dominated advisory committee on complaints to the Board of Registration, (3) provide for a Limited License to practice medicine, and (4) provide for Board certification of Physician's Assistants. The act affects doctors of medicine only and is not a uniform practice act. Names of all sponsors will be published in a subsequent Michigan Medicine.

THE COMMITTEE ON BETTER Utilization of Obstetrical Beds (a subcommittee of the Committee on Maternal and Perinatal Health) has been authorized to continue efforts to consult with and make impact on local county medical societies, individual hospitals and community planning groups in the interest of effective planning for obstetric and newborn services at the community level. The Council November 10 allocated $1,000 to the MSMS committee members to cover the expenses of travel. The Michigan Department of Public Health will do likewise for its representatives, and the Michigan Association of Osteopathic Physicians and Surgeons will be requested to cover the expenses of its representatives.

A DOCTORS' FEASIBILITY STUDY OF HMOs is planned by the Governmental Medical Care Programs Committee, pursuant to authority granted by The Council. The committee November 18 cleared the way for MSMS to seek a federal grant to finance the study cooperatively with a nationally-recognized health and management systems organization. If approved, the grant will fund a study in Michigan concentrated on practicing physicians' attitudes toward HMO and similar types of health care delivery in his own county or region. The project does not commit MSMS to support of the HMO concept, nor does it obligate any component society to resultant reports and findings.

FLEX EXAMINATION (Federation Licensing Examination) will be conducted by the Michigan State Board of Registration in Medicine December 8-9-10 in the MSU Union Building. The deadline for the next exam will be April 1 at the State Board office for exams to be administered June 13-14-15.

A SERIES OF field visitations has been started by Staffer Herbert Mehler, Department of Government Relations, to observe new health-care efforts. Reports have been provided to MSMS Council members about the Gratiot Family Health Center at Alma and the Detroit Medical and Surgical Center.

THE MICHIGAN CAMPAIGN to support Donald N. Sweeny, Jr., MD, Detroit, for the AMA Council on Medical Service was launched at the AMA session in New Orleans by the MSMS delegates. George W. Slagle, MD, Battle Creek, will be ending his second term on that AMA Council in June.

THE MSU BOARD of Trustees approved affiliations Nov. 19 for medical students to train at Lansing St Lawrence Hospital and osteopathic students at DO hospitals in Madison Heights, Detroit and Lansing. MSU is now associated with 23 hospitals.

ONLY HOUSE APPROVAL of Senate amendments are needed for HB5011 which will regulate Michigan snowmobiles. Among the new regulations are MSMS-supporte goals including age limitations, braking standards, etc.

AS PART of the MSMS continuing effort against drug abuse, Michigan Medicine carries a series of five scientific articles on drugs in the current November issue.

THERE ARE 116 physician's assistants employed in the nation. Legislative bills about the physician's assistants are under study by committees of the Michigan legislature.

THE EFFORTS OF MSMS to urge the legislature to train more medical students in Michigan were explained by Judd Arnett in the Detroit Free Press Sunday, Nov. 21. Columnist Arnett quoted extensively from a letter written to him by MSMS Council Chairman Brooker L. Masters, MD, in reply to a previous column by Mr. Arnett.

GREATER FLEXIBILITY and continuity of services to state medical societies is expected now that the AMA has decided to place two field representative in six regional offices rather than continue to maintain 12 offices.

TO RETAIN THEIR MEMBERSHIP in the Pennsylvania Medical Society, physicians there must qualify for the AMA Physician's Recognition Award for continuing medical education during the three-year period beginning July 1, 1972.

FINANCIAL PROBLEMS of medical students will be considered at a joint meeti of the MSMS Liaison Committee with Medical Students and the MSMS Education Liaison Committee December 16 in Ann Arbor. The three SAMA chapters have been invited to send representatives.

THE "MSMS AT WORK" booklet describing services to members and the public will be sent to every MSMS member as part of the December issue of Michigan Medicine. Watch for it.

Michigan Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. © 1971 Michigan State Medical Society. Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

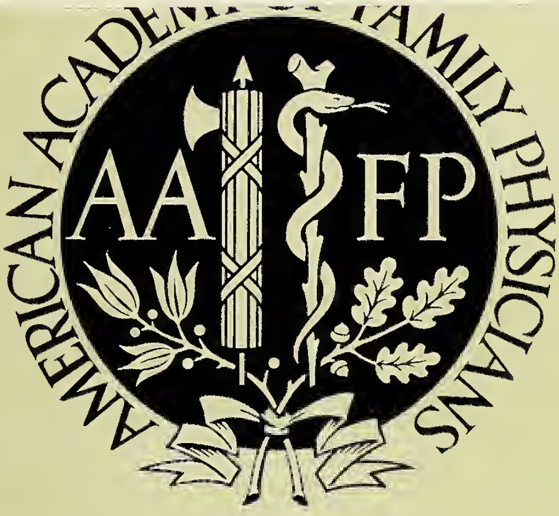
Second Class Postage Paid at East Lansing, Mich.
and at additional mailing offices.

UNIVERSITY OF CAL
LIBRARY SCH OF MED
THIRD & PARNASSUS AVE
SAN FRANCISCO CAL 94122

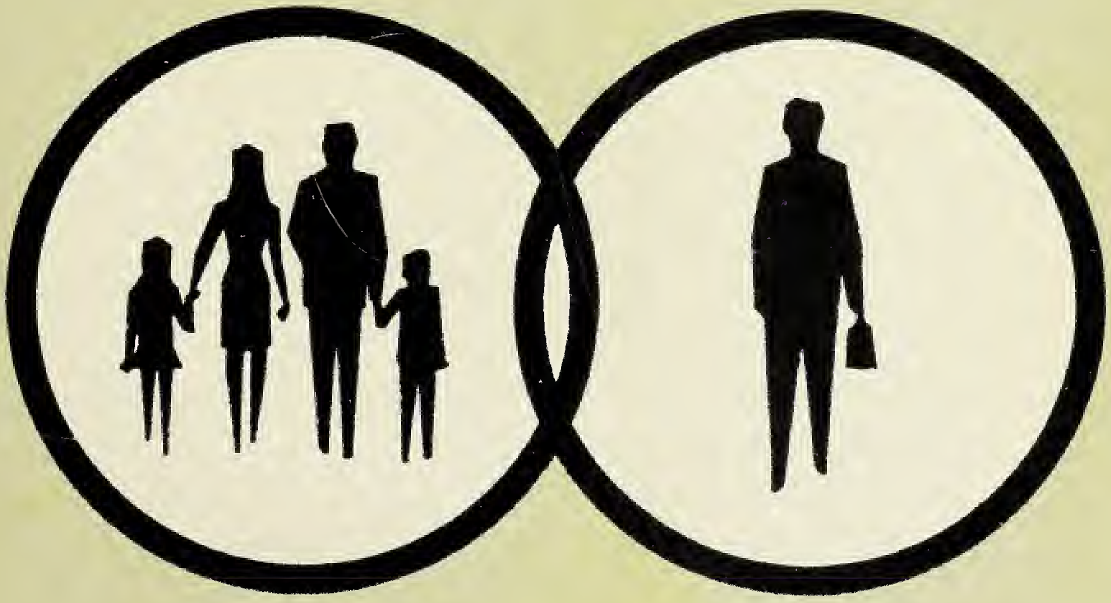
Turn to page 1182 for your tear-out brochure on "MSMS at work . . ."

Michigan Medicine

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
DEC 3 0 1971


AMERICAN ACADEMY OF FAMILY PHYSICIANS
AAFP

Medicine's newest specialty, Family Practice, is highlighted in an important article in this issue. At left, the new seal of the renamed academy, and below, the symbol of the specialty. Now, turn to page 1145.



Patients fell asleep quickly

Dalmane (flurazepam HCl) 30 mg reduced awake time—both before and after falling asleep - by fifty percent of pretreatment values in patients with insomnia.[1,2]

Two sleep laboratory studies recently confirmed findings of earlier studies of this type, namely, that Dalmane 30 mg was effective in patients who had trouble falling asleep, staying asleep or both. One 30-mg capsule of Dalmane usually induced sleep within 22 minutes, decreased the number of awakenings and the wake time after the onset of sleep, and provided 7 to 8 hours of sleep without need to repeat dosage during the night.

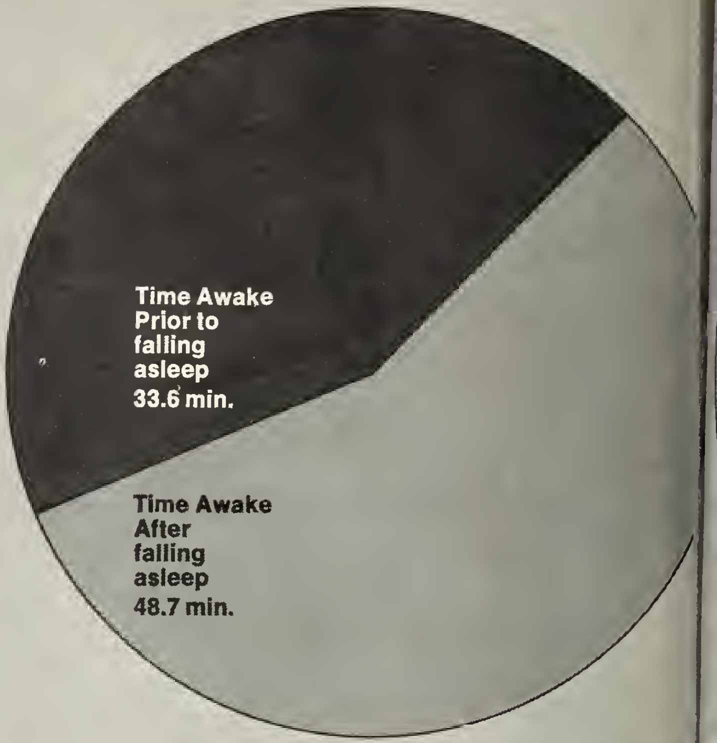
These studies utilized identical protocols and included eight insomniac patients. Sleep laboratory measurements in a limited number of patients are derived from all-night electroencephalographic, electro-oculographic and electromyographic tracings. Unlike traditional methods of evaluation, they are quantitative, reproducible and projectable to large numbers of subjects.

Results shown represent average values in all subjects for the three consecutive nights of placebo administration prior to Dalmane therapy and the seven consecutive nights on Dalmane 30 mg.

Dalmane is also relatively safe, as reported in clinical studies. Instances of morning "hangover" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, lightheadedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated. (An initial dose of Dalmane 15 mg should be prescribed for these patients.)

References: 1. Frost, J. D., Jr.: "A System for Automatically Analyzing Sleep," Scientific Exhibit presented at Clinical Convention, A.M.A., Boston, Nov. 29-Dec. 2, 1970, and Aerospace M.A., Houston, April 26-29, 1971.
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N.J.

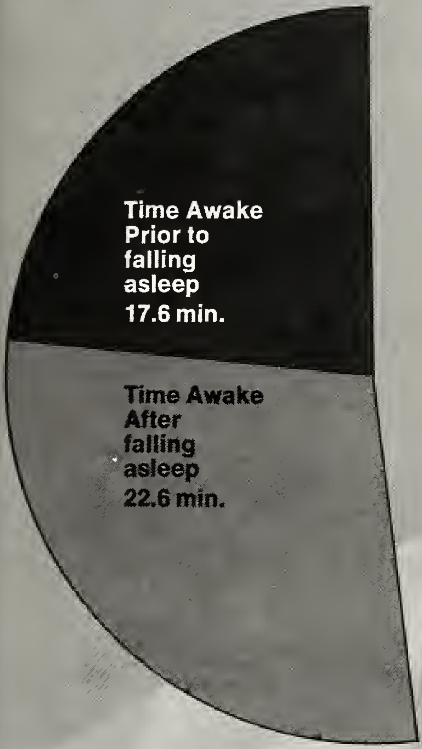
Before Dalmane (flurazepam HCl)



Measurements of sleep in the sleep laboratory are obtained with electroencephalographic, electro-oculographic and electromyographic recordings.

and slept through the night

On Dalmane (flurazepam HCl)



rage sleep laboratory measurements in cited studies

ameter	Before Dalmane	On Dalmane
ne required to fall asleep	33.6 min.	17.6 min.
ke time after onset of sleep	48.7 min.	22.6 min.
mber of wakeful periods after nset of sleep	12.2	8.4
al sleep time	420.0 min.	447.5 min.
al sleep percent	88.6	94.5

linical effectiveness as roven in the sleep laboratory

Dalmane®

(lurazepam HCl)

e 30-mg capsule h.s.—usual adult dosage.

e 15-mg capsule h.s.—initial dosage for erly or debilitated patients.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

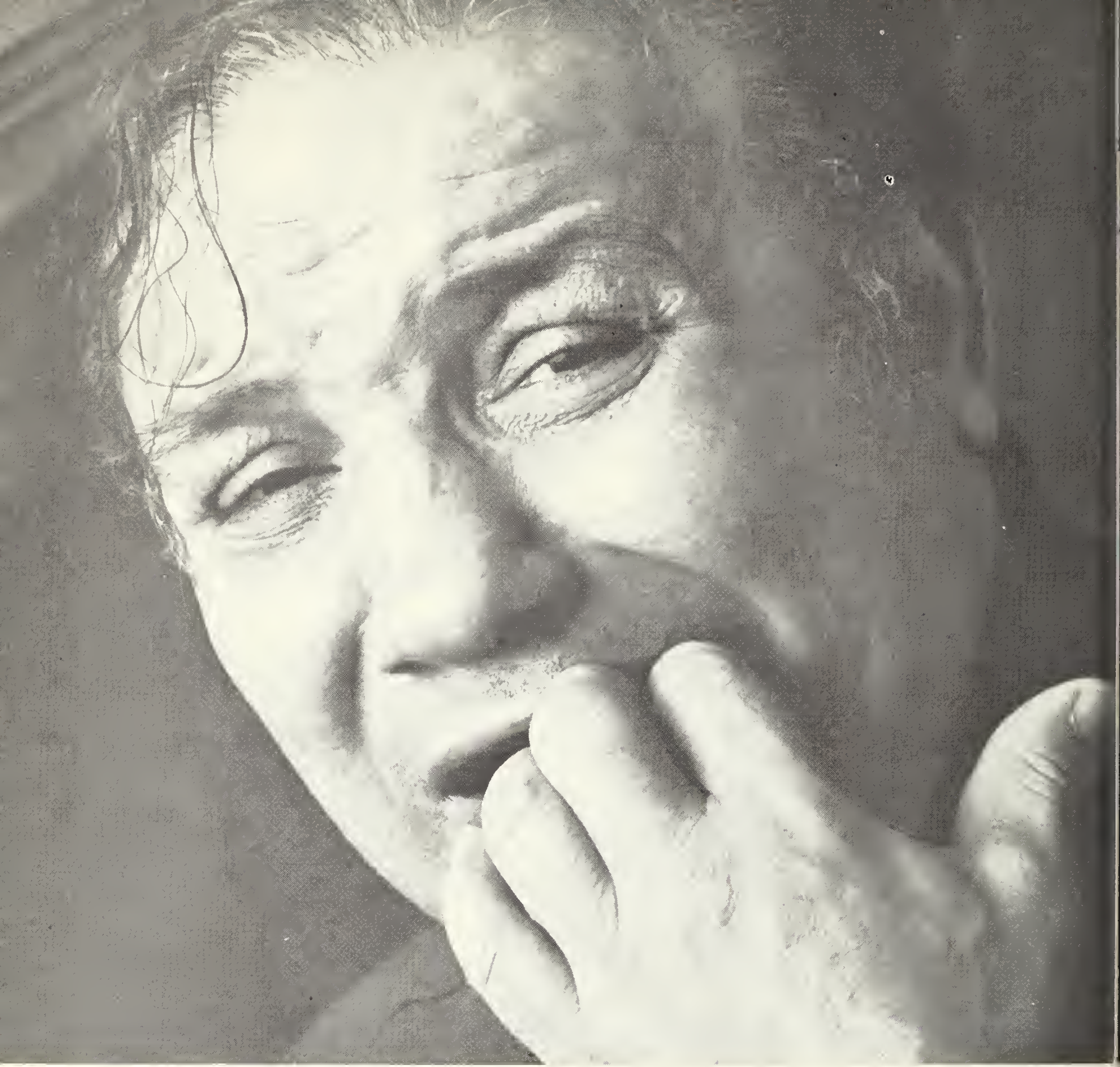
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110



DU-7019

Who's afraid of the big bad enema?

We all are. But Dulcolax is the cure for enemaphobia. It can do almost anything an enema can — except look scary.

Just one suppository usually assures a predictable bowel movement in 15 minutes to an hour. Gone are the tubing, the "accidents", and the bruised egos associated with enemas.

For preoperative preparation, the combination of tablets at night and a suppository the next morning usually cleans the bowel thoroughly. Suppositories may also be particularly helpful when straining should be avoided as in postoperative care.

As with any laxative, abdominal cramps are occasionally noted. The drug is contraindicated in the acute surgical abdomen.

Dulcolax® ...it's predictable
bisacodyl

Geigy GEIGY PHARMACEUTICALS, DIVISION OF GEIGY CHEMICAL CORPORATION, ARDSLEY, NEW YORK 10502 UNDER LICENSE FROM BOEHRINGER INGELHEIM G.M.B.H.

Michigan Medicine

IN THIS ISSUE

SCIENTIFIC ARTICLES

1107 Posterior colpotomy; Harvey D. Lynn, MD, Juan Carlos DiMusto, MD
1111 Alcoholic myopathy and myoglobinuric nephrosis; R. Powers, MD, C. E. Thompson, MD, P. E. Schroeder, MD
1114 and 1124 Abstracts of papers presented to the Detroit Surgical Association
1115 A simple cardiodynamic assessment of mitral insufficiency; Gerald C. Timmis, MD, Seymour Gordon, MD, Renato G. Ramos, MD
1121 Energy balance in the newborn baby: Aspects of care for the community hospital; Thomas A. Helmrath, MD
1125 Occult subacute thyroiditis—diagnostic challenge; Joel I. Hamburger, MD

SPECIAL ARTICLES

1141 Where do Michigan physicians come from? John H. Anthony
1145 Family practice, Medicine's newest specialty; George A. Dean, MD
1152 Michigan's poison control centers listed

OTHER FEATURES

1100 County societies
1103 President's page
1104 MSMS leadership
1110 The viewbox
1120 Perinatal tips
1133 New members
1136 MSMS news
Michigan Mediscene
1150 About doctors
1154 Mailbag
1155 Ancillary
1168 Monthly surveillance report
1170 In memoriam
1175 Photo pages
1179 Breaking news

MICHIGAN MEDICINE is the official organ of the Michigan State Medical Society, published under the direction of the Publication Committee. Published four times a month in December and January, three times in all other months, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Michigan. and at additional mailing offices. Yearly subscription rate, $9.00; single copies, 80 cents. Additional postage: Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year. Printed in USA. All communications relative to manuscripts, advertising, news, exchanges, etc., should be addressed to Judith Marr, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Phone Area Code 517, 337-1351. © 1971 Michigan State Medical Society.

Devoted to the interests of the medical profession and public health in Michigan.

INFORMATION FOR CONTRIBUTORS

1. Address scientific manuscripts to the Publication Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823. Submit original, double-spaced typewritten copy and two carbon copies or photo copies on letter size (8½ x 11 inch) paper. On page one, include title, authors, degrees, academic titles, and any institutional or other credits.

2. Authors are responsible for all statements, methods, and conclusions. These may or may not be in harmony with the views of the Editorial Staff. It is hoped that authors may have as wide a latitude as space available and general policy will permit. The Publication Committee expressly reserves the right to alter or reject any manuscript, or any contribution, whether solicited or not.

3. Illustrations should be submitted in the form of glossy prints or original sketches from which reproductions will be made by Michigan Medicine.

4. Articles should ordinarily be less than four printed pages in length (3000 words).

5. References should conform to *Cumulative Index Medicus,* including, in order: Author, title, journal, volume number, page, and year. Book references should include editors, edition, publisher, and place of publication, as well.

6. The editors welcome, and will consider for publication, letters containing information of interest to Michigan physicians, or presenting constructive comment on current controversial issues. New items and notes are welcome.

7. It is understood that material is submitted for exclusive publication in Michigan Medicine.

PUBLICATION COMMITTEE

Edward J. Tallant, MD
Detroit
Chairman

Robert M. Leitch, MD
Battle Creek

Donato F. Sarapo, MD
Adrian

SCIENTIFIC EDITOR
John W. Moses, MD

EXECUTIVE EDITOR
Herbert A. Auer

MANAGING EDITOR
Judith Marr

Genesee doctors fighting drug battle on several fronts

The Genesee County Medical Society has called for all members of the local medical community to become involved if significant progress is to be made in combating the Flint-area drug problem.

The call was made following a report on the local drug abuse situation compiled by the society and presented to the Genesee County Regional Drug Abuse Commission.

The society itself is helping finance a new health institute, to be a part of the Flint College and Cultural Center. The physicians hope to establish an educational drug abuse section in the proposed building.

The society also is developing a one-day symposium on the drug abuse problem and is considering contributing funds to establish a medical library dealing with drug problems.

Ingham physicians document rising costs of malpractice insurance

The rising costs of malpractice insurance have been documented by members of the Ingham County Medical Society in response to their own survey.

A total of 18 doctors of the 138 society members who answered the questionnaire said they had been involved in malpractice suits in the past one to three years. There are 281 ICMS members.

The survey revealed that five years ago the majority of the physicians paid malpractice insurance premiums that ranged from $50 to $550. Three years ago the majority were paying premiums from $100 to $700. Today the premium range is between $1,000 and $3,000, with two physicians paying annual premiums of $5,000 each.

The Ingham doctors also indicated they favored by a 95 yes to 84 no vote a doctor-lawyer arbitration panel for malpractice cases.

Detroit charter board considers suggestions of Wayne society

The Wayne County Medical Society has offered its suggestions for the final structure of health services in Detroit when it presented a statement to the Committee on Environment and Health of the Charter Revision Commission of the City of Detroit.

The WCMS, represented by Robert K. Whiteley, MD, president, and Louis E. Heideman, MD, trustee, advocated consolidation of health programs and merging of the City of Detroit and Wayne County Health Departments through its statements. It proposed a division of a health services administration, a department of hospitals and a public service corporation to run Detroit General Hospital; and suggested that community health centers be only a part of a pluralistic mechanism to provide health care to the city's citizens.

The timetable calls for the Environment and Health Committee to make its final report to the Commission after January 1, for the Charter Commission to complete its drafting of the new charter by June 1 and for the charter to be presented to the voters in the November, 1972, elections.

Medical service center endorsed by Jackson society

A Jackson medical services center to serve the poor and minority groups has been enthusiastically endorsed by the Jackson County Medical Society. Three JCMS members, Frank Schrader, MD, Jack Bentley, MD and Roger Hensley, MD, are members of the board of the new facility, which was incorporated Sept. 30. The Jackson society is helping to recruit medical personnel to work in the center, which will be housed in the local Community Action Agency building.

Table tennis team's visit to China related to Washtenaw MDs

Members of the Washtenaw County Medical Society heard first-hand the account of the U. S. Table Tennis Association team's recent tour of China. Mr. Graham Steenhoven, president of the TTA, accompanied the team and brought pictures of its experiences to the October Washtenaw meeting.

(Continued on Page 1102)

IN ASTHMA
IN EMPHYSEMA

optional therapy

THE mudranes

All Mudranes are bronchodilator-mucolytic in action, and are indicated for symptomatic relief of bronchial asthma, emphysema, bronchiectasis and chronic bronchitis. **MUDRANE tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **Iodide side-effects:** May cause nausea. Very long use may cause goiter. Discontinue if symptoms of iodism develop. **Iodide contraindications:** Tuberculosis; pregnancy (to protect the fetus against possible depression of thyroid activity). **MUDRANE-2 tablets** contain 195 mg. potassium iodide; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline. **Iodide side-effects and contraindications are listed above. MUDRANE GG tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline; 21 mg. phenobarbital (Warning: may be habit-forming); 16 mg. ephedrine HCl. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions** are those for aminophylline-phenobarbital-ephedrine combinations. **MUDRANE GG-2 tablets** contain 100 mg. glyceryl guaiacolate; 130 mg. aminophylline. **Dosage** is one tablet with full glass of water, 3 or 4 times a day. **Precautions:** Those for aminophylline. **MUDRANE GG Elixir.** Each teaspoonful (5 cc) contains 26 mg. glyceryl guaiacolate; 20 mg. theophylline; 5.4 mg. phenobarbital (Warning: may be habit-forming); 4 mg. ephedrine HCl. **Dosage:** Children, 1 cc for each 10 lbs. of body weight; one teaspoonful (5 cc) for a 50 lb. child. Dose may be repeated 3 or 4 times a day. Adult, one tablespoonful, 4 times daily. All doses should be followed with ½ to full glass of water. **Precautions:** See those listed above for Mudrane GG tablets.

MUDRANE—original formula

First choice

MUDRANE-2

When ephedrine is too exciting
or is contraindicated

MUDRANE GG

During pregnancy or when K.I. is
contraindicated or not tolerated

MUDRANE GG-2

A counterpart for Mudrane-2

MUDRANE GG ELIXIR

For pediatric use
or where liquids are preferred

Clinical specimens
available to physicians.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23217
Manufacturers of Ethical Pharmaceuticals

INSOMNIA
SEDATE EFFECTIVELY

With QUĪ-A-ZONE — you can sedate effectively. A balanced combination of short, intermediate, and long-acting barbiturates (totaling 100 mg.) in a rapidly disintegrating tablet — sedation is provided within a few minutes . . . followed by sound restful sleep . . . usually without morning hangover. The four barbiturates in QUĪ-A-ZONE have dual channels of elimination (renal and hepatic) to lessen metabolic burden, decrease barbiturate retention, and minimize depression.

QUĪ-A-ZONE™

Each rapidly-disintegrating tablet contains 25 mg. secobarbital, 25 mg. pentobarbital, 25 mg. butabarbital, and 25 mg. phenobarbital. Bottles of 100.
Usual Adult Dose: 1 to 2 tablets before retiring.
PRECAUTION: Should not be administered to patients sensitive to barbiturates, or in cases of known previous addiction. Warning: May be habit forming.

W-C PRECISION PHARMACEUTICALS

SEND FOR SAMPLES.
WALKER, CORP & CO., INC.
Syracuse, New York 13201

Detoxification program for drug abusers supported by WCMS

The Wayne County Medical Society has endorsed a pilot program for ambulatory detoxification of drug dependents proposed by the Detroit Department of Health and recommended by the WCMS Ad Hoc Committee on Drug Addiction.

It is proposed that when a drug abuser requests help, he will be registered immediately at the Herman Kiefer Hospital and within 24 hours be referred to one of the participating hospitals for detoxification. He will be given a complete physical examination by an attending physician, a written prescription indicating dosage for the detoxification period and a referral to the medical social service coordinator with authorization for two visits by a social service worker.

Kent doctors concerned with cancer

The management of cancer patients is the subject of recent actions by the Kent County Medical Society. The KCMS board has officially requested all local hospitals to include in their standard procedures the American Joint Committee staging system for cancer. In addition, the medical society has given its official sanction to implementation of a colostomy visitation program, similar to the Reach to Recovery program for mastectomy patients. The colostomy program would be set up according to guidelines of the national office of the cancer society and would be operated by the Kent County Unit.

Calhoun doctors cosponsor arthritis meeting

The Calhoun County Medical Society was cosponsor of a public forum on arthritis staged early in October in Battle Creek. The Michigan Arthritis Foundation was the other cosponsor for the forum, which featured panelists John B. Huntington, MD, Battle Creek; Jules L. Netreda, MD, Marshall, and James J. Lightbody, MD, Detroit, medical director of the Michigan Arthritis Foundation and past president of MSMS.

President's Page

Sidney Adler, MD
MSMS President

The Tortoise and the Hare — Continued

The long-suffering American people have lived for a long time with radicals, reactionaries, revolutionaries, demagogues and other headline-hunters. Maybe that is what our system and way of life that they find so obnoxious are all about.

But there is a new and frightening element in our social and political order today which I don't believe existed before. So many good people have been exposed so much and for so long to the carping critics, demagogues and propagandists of the right and left that they have lost faith and confidence in our leadership and in our systems. Vituperation and deprecation are the way to popularity and success; moderation and reason are in disrepute.

We have seen this trend in the meetings of our medical societies and in the words and writings of some of our extremist colleagues. They would like to pour the baby down the drain with the bath-water and start afresh to create something different—anything different—although few agree on what it should be.

Can those of us who value our institutions do anything to reverse this trend? A step, at least, in the right direction might be to confine ourselves to the things we know and are qualified to judge—the principles and practice of medicine.

We are not political or social scientists, economists or statesmen. For certain, we are not experts in public relations. We are physicians. Devotion of our professional knowledge and skills to our patients earns us respect.

Activist concern with all of the problems of mankind, government and the society of which we are part may not only split us into dissident groups, but also may generate wide-spread disrespect bordering on contempt. Evolution—not revolution—should be the correct approach to the current pattern of medical care.

We all have one thing in common. We want to practice our profession on the highest possible level, and to do the best job possible for our patients. The highest standard of care has always been our goal.

If we are to regain the high respect of the community, which certainly has been lessened in recent years, will it be because of our contribution to patient care, or because of poorly informed attempts to preserve or to reform that which has become known as "the establishment?"

Are we all so clean that we shouldn't put our own houses in order before we complain of our neighbors' housekeeping?

Maybe not.

MSMS Leadership

PRESIDENT: Sidney Adler, MD, Detroit
PRESIDENT-ELECT: John J. Coury, MD, Port Huron
SECRETARY: Kenneth H. Johnson, MD, Lansing
ASST. SECRETARY: Ross V. Taylor, MD, Jackson
TREASURER: John R. Ylvisaker, MD, Pontiac
ASST. TREASURER: Ernest P. Griffin, Jr., MD, Flint
SPEAKER: Vernon V. Bass, MD, Saginaw
VICE-SPEAKER: James D. Fryfogle, MD, Detroit
PAST PRESIDENT: Harold H. Hiscock, MD, Flint

COUNCIL CHAIRMAN: Brooker L. Masters, MD, Fremont
VICE CHAIRMAN: Robert M. Leitch, MD, Battle Creek
DIRECTOR: Warren F. Tryloff, East Lansing
GENERAL COUNSEL: Lester P. Dodd, Detroit
LEGAL COUNSEL: A. Stewart Kerr, Detroit
SCIENTIFIC EDITOR: John W. Moses, MD, Detroit
ECON. CONSULTANT: Clyde T. Hardwick, Houghton
HISTORIAN: Wm. J. Stapleton, Jr., MD, Detroit
ASST. HISTORIAN: Wm. M. LeFevre, MD, Muskegon

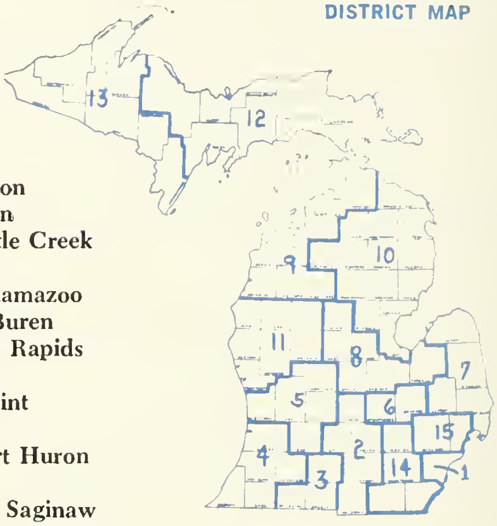
AMA DELEGATES

John J. Coury, MD, Port Huron
George W. Slagle, MD, Battle Creek
Donald N. Sweeny, Jr., MD, Detroit (Chairman)
Joseph A. Witter, MD, Rochester
Otto K. Engelke, MD, Ann Arbor
Robert E. Rice, MD, Greenville
John W. Moses, MD, Detroit
Paul T. Lahti, MD, Royal Oak

ALTERNATES

James C. Danforth, Jr., MD, Detroit
Marjorie Peebles Meyers, MD, Detroit
Robert C. Prophater, MD, Bay City
Vernon V. Bass, MD, Saginaw
Frank B. Walker II, MD, Grosse Pointe
Donald T. Anderson, MD, Kingsford
Richard McMurray, MD, Flint
Brooker L. Masters, MD, Fremont

First District Councilors: (Wayne County)
Edward J. Tallant, MD, Detroit
Ralph R. Cooper, MD, Detroit
Frank G. Bicknell, MD, Detroit
Brock E. Brush, MD, Detroit
Louis R. Zako, MD, Allen Park
Second District Councilor: Ross V. Taylor, MD, Jackson
Counties: Clinton, Eaton, Hillsdale, Ingham, Jackson
Third District Councilor: Robert M. Leitch, MD, Battle Creek
Counties: Branch, Calhoun, St. Joseph
Fourth District Councilor: W. Kaye Locklin, MD, Kalamazoo
Counties: Allegan, Berrien, Cass, Kalamazoo, Van Buren
Fifth District Councilor: Noyes L. Avery, MD, Grand Rapids
Counties: Barry, Ionia-Montcalm, Kent, Ottawa
Sixth District Councilor: Ernest P. Griffin, Jr., MD, Flint
Counties: Genesee, Shiawassee
Seventh District Councilor: James H. Tisdel, MD, Port Huron
Counties: Huron, Sanilac, Lapeer, St. Clair
Eighth District Councilor: William A. DeYoung, MD, Saginaw
Counties: Gratiot-Isabella-Clare, Midland, Saginaw, Tuscola
Ninth District Councilor: Adam C. McClay, MD, Traverse City
Counties: Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet combined), Wexford-Missaukee
Tenth District Councilor: Robert C. Prophater, MD, Bay City
Counties: Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties, (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined)
Eleventh District Councilor: Brooker L. Masters, MD, Fremont
Counties: Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana
Twelfth District Councilor: Raymond Hockstad, MD, Escanaba
Counties: Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger
Thirteenth District Councilor: Donald T. Anderson, MD, Wakefield
Counties: Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon
Fourteenth District Councilor: Donato F. Sarapo, MD, Adrian
Counties: Lenawee, Livingston, Monroe, Washtenaw
Fifteenth District Councilor: Sydney Scher, MD, Mount Clemens
Counties: Macomb, Oakland



COUNCILOR DISTRICT MAP

MSMS at work...

...WITH LEGAL OPINIONS FOR MEDICINE

MSMS seeks to legally protect and advance the medical profession through a powerful trio: the staff-manned Department of Government Relations, the physician-oriented Legal Affairs Committee, and a legal counsel.

Together they cover the broad area of evaluating and suggesting state legislation, and protecting the professional welfare of physician members.

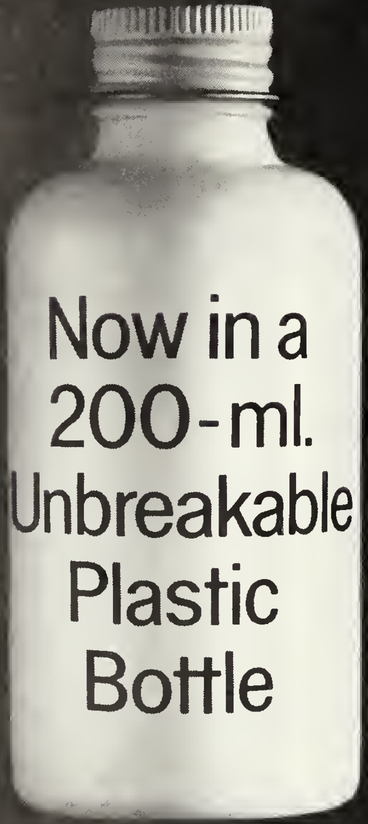
The legal counsel and the legislative affairs manager work in concert to check through the hundreds of prospective statutes submitted each year to the Michigan legislature. Bills that need the professional expertise of legal counsel are sent to his Detroit office where he may analyze and/or write possible amendments as needed, in cooperation with MSMS staff members.

The counsel receives a large number of queries for legal advice from individual members and component societies, and from hospital administrators. After researching previous court decisions, or studying the request, he answers each letter, with a carbon that goes into the files at MSMS. Thus, an extensive law-oriented view of medical problems over the past 20 years has been collected through this MSMS service.

Counsel points out that the most prolific inquiry sources are the MSMS Legal Affairs Committee, whose meetings he attends, and the doctors and hospital administrators in the smaller communities. However, he is available to answer as many inquiries as possible from physician members and societies.

Queries cover every conceivable health topic: emergency room procedures, physician assistant problems, drug clinics, component society bylaws problems, etc.

(For more on MSMS at work, turn to page 1182)


Now in a
200-ml.
Unbreakable
Plastic
Bottle

Same price as 150-ml. size*

Two dosage strengths–
125 mg./5 ml.
and
250 mg./5 ml.

V-Cillin K®, Pediatric

potassium
phenoxymethyl
penicillin

Lilly

100210

Additional information available to the profession on request.

Eli Lilly and Company
Indianapolis, Indiana 46206

**Based on Lilly selling price to wholesalers.*

Posterior colpotomy:

A frequently - neglected procedure

By Harvey D. Lynn, MD, F.A.C.O.G.
Juan Carlos DiMusto, MD
Detroit

Posterior colpotomy is a relatively simple operation which can be important in the diagnosis and recognition of pelvic pathology. This procedure also may be utilized for definitive pelvic surgery, which often obviates the necessity for laparotomy.

Before the turn of the century, Howard Kelly began to use the posterior colpotomy approach for the management of ectopic pregnancy. Since then, several reports have been published on the use of this technic; the operation, however, has not maintained the popularity we believe it deserves.

Our object in writing this paper is to assess the usefulness of the posterior colpotomy as a diagnostic and therapeutic tool by reviewing our experience with it.

Study Group

This report covers 371 colpotomies performed on private and staff patients at Harper, Hutzel and Detroit General Hospitals from July, 1964 to June, 1970. The patients ranged in age from 18 to 59 years, with 27 the average age. The majority were multiparous, although 78 were nulliparous. All had experienced coitus. General anesthesia was used for 326 patients and spinal anesthesia was administered to 45 patients.

Posterior colpotomy was utilized when visualization of the pelvic organs was considered necessary for diagnostic purpose or to perform certain definitive operations (Table I).

The operation was performed on women with pelvic symptoms, such as chronic pain, which were not accounted for by clinical examination, and on the asymptomatic patient with such pelvic abnormalities as small pelvic masses or other obscure pelvic findings.

Posterior colpotomy was included in our infertility protocol. Direct observation of tubal patency was obtained by injecting dye through a cannula in the uterine cavity.

Table I

Primary Indications for Colpotomy

Diagnostic	No. of Patients
Chronic pelvic pain	79
Abnormal uterine bleeding	74
Infertility work-up	36
Pelvic mass	53
Polycystic ovary	16
Non-visualization of fallopian tubes	9
Ovarian cyst	10
Enlarged or irregular uterus	16
Acute pelvic inflammatory disease	4
Perforation of uterus	4
Endometritis	3
Subtotal	304
Therapeutic	
Sterilization	46
Pelvic abscess drainage	18
Castration	3
Subtotal	67
TOTAL	371

Patients with certain endocrine disorders—polycystic ovary, for instance—were evaluated by colpotomy and the ovaries were biopsied when necessary.

Frequently, posterior colpotomy was helpful when a suspicion of ectopic pregnancy existed, especially in the patient with bizarre or atypical symptoms or signs. A therapeutic operation was, on occasion, carried out through the same incision, and in the majority of cases, when blood was found in the cul-de-sac, the site of origin could be determined.

Posterior colpotomy was the procedure chosen in the management of cul-de-sac abscesses. Uterosacral ligament transection for pelvic pain also was performed through the colpotomy approach (Doyle operation). Tubal ligations with partial dissection of the fallopian tubes were performed

Scientific Papers

The authors are with the Department of Gynecology and Obstetrics, Wayne State University School of Medicine, Detroit, Mich.

through a colpotomy incision, except in the immediate postpartum because of uterine size and the increased vascularity of the pelvis and vagina.

In examination of the uterus when perforation during a curettage was suspected, colpotomy proved useful. Exploration was performed immediately without changing the position of the patient, thus eliminating the need for laparotomy or the worrysome period of "close observation" for signs of hidden abdominal bleeding. Bleeding at the perforation site could be controlled by a figure-of-eight suture.

Excision of the ovaries for purposes of castration was yet another definitive procedure performed through the colpotomy incision. Removal of pedunculated myomata and small ovarian cysts also was effected by that route.

Operative Technic

After the patient is anesthetized and placed in the lithotomy position, the perineum, vulva and vagina are scrubbed with surgical soap, washed with tincture benzalkonium, and the bladder emptied by catheter. A self-adherent plastic sheet covers the operative field to prevent anal contamination. A weighted speculum is inserted into the vagina, and the posterior lip of the cervix grasped with Allis forceps. Moderate traction is applied in the direction of the symphisis pubis. The vaginal mucosa is infiltrated with up to 10 ml of 1/200,000 epinephrine at the level of the posterior fornix to minimize oozing from the edges of the incision. More than 10 ml of solution may distort the tissues, making dissection difficult. A midline transverse incision is made in the vaginal mucosa between the uterosacral ligaments, approximately 2 to 3 cm below the posterior lip of the cervix. The edges of the incision are grasped with Allis forceps, and the submucosa and areolar tissue are "spread open" by scissors dissection until the peritoneum is identified. Before incising the peritoneum, a needle aspiration of the cul-de-sac is usually done for cytologic study. Then the peritoneum is incised and the opening enlarged bilaterally. Narrow Deaver retractors are inserted at the 3, 6, and 9 o'clock positions. By tilting to approximately a 15-degree Trendelenberg position, the intestines usually gravitate out of the operative field, although occasionally a gauze pack is needed to facilitate the displacement. The posterior surface of the uterus is gently grasped with two Allis forceps which are manipulated to expose the adnexa. Babcock forceps are used to handle the adnexal structures. Gentle traction while moving instrument over instrument brings the ovary into the field; usually the tube is readily observed when the ovary is exposed. The opposite adnexa is similarly visualized and explored. Any necessary definitive procedures may be performed at this time. The incision is closed in two layers, using continuous 000 chromic catgut sutures for the peritoneum and for the vaginal mucosa.

Table II

Procedures Performed Through Colpotomy Incision

	No. of Cases
Bilateral tubal ligation	41
Biopsy of ovary	10
Drainage of cul-de-sac abscesses	18
Lysis of tubal adhesions	30
Wedge resection of ovaries	15
Salpingectomy	29
Excision of ovarian cyst	11
Suture of bleeding ovary	6
Myomectomy	4
Doyle operation	5
Repair of uterine perforation	2
Bilateral oophorectomy	3

Meticulous handling of tissues and careful closure of the incision is important. Vaginal packs, local antibiotics and hemotherapeutic agents are not used. Patients are ambulated the afternoon or evening of the day of surgery.

Results

Definitive surgery was performed through the colpotomy incision in 91 patients, and cul-de-sac abscesses were drained in 18 others. **(Table II)**

Attempts at colpotomy were abandoned in 28 cases because the peritoneum could not be identified; subsequent laparotomy in 19 of these cases revealed obliteration of the cul-de-sac by adhesions and scars. In the remaining nine cases, laparotomy was not performed.

In 304 cases the posterior colpotomy was performed mainly for diagnostic purposes; in 21 of these cases the cul-de-sac could not be entered, and in 18 others visualization and digital exploration did not yield information complete enough for the surgeon's satisfaction. In the remaining 265 patients (87.1 per cent) a diagnosis was obtained.

Hospitalization for patients who had colpotomy alone or combined with uterine curettage and/or conization of the cervix averaged 3.6 days. Where procedures on the tubes and ovaries were performed, the period of hospitalization was extended but did not exceed seven days.

Other procedures performed at the time of colpotomy, in addition to operations on the tubes or ovaries or drainage of abscesses, included 309 uterine curettages, 84 conizations of the cervix, 56 biopsies of the cervix, and 16 plastic repairs for cysto-urethrocele and rectocele.

Table III

Contraindications to Colpotomy

ABSOLUTE

1. Severe chronic pelvic inflammatory disease
2. Large pelvic tumors
3. Obliteration of the cul-de-sac
4. Hemo peritoneum with shock
5. Severely ill patient with acute inflammatory disease
6. Septic abortion and septic shock
7. Acute vaginitis
8. Known pelvic malignancy

RELATIVE

1. Previously diagnosed endometritis
2. Advanced intrauterine pregnancy
3. Contracted or stenosed vaginal inlet
4. Narrow pubic arch

Except for the expected slight rise in blood pressure, no untoward effects on the patient were observed when epinephrine solution was injected into the vaginal mucosa. However, this vasoconstrictor was not used in 23 patients with marked hypertension.

The only complications attributable to the procedure in our series, aside from several cases of transient hyperthermia, consisted of three hematomas in the posterior fornix of the vagina, two of which drained spontaneously on the third and fifth postoperative day and did not require further treatment. The third was drained with a hemostat in the examining room. Two other patients developed cul-de-sac abscesses and had to be readmitted seven and ten days after the original operation, at which time the abscesses were drained by colpotomy.

Comments

Colpotomy is not a substitute for laparotomy. However, there are instances when colpotomy, alone or combined with specific procedures, will obviate the need for laparotomy. In these situations, the advantages of colpotomy are several: fewer planes to dissect and repair; absence of external scar; less postoperative distress and morbidity, and the length of hospitalization is brief.

A number of potentially serious pathologic processes may be detected early by colpotomy, thus allowing therapy to be instituted in time to obviate future major problems.

Colpotomy possesses a marked advantage over culdoscopy and laparoscopy in that no special, expensive or delicate instruments are needed. The procedures can be performed in any operating room with the instruments commonly available, and in conjunction with other vaginal procedures without disruption for special adaptations. Less discomfort exists during and after the operation, and general anesthesia can be employed. Direct and better visualization is afforded without optic distortion. Biopsy or definitive therapy can be performed.

Certain disadvantages to colpotomy do exist. **Table III** lists the absolute and relative contraindications for the operation. The operative field offered by this procedure cannot readily be enlarged. Other abdominal organs cannot be visually inspected or palpated; therefore pathologic processes beyond the immediate pelvis can be overlooked. Performing a posterior colpotomy requires more experience than does a laparotomy, but proficiency in this operation can be achieved more rapidly than in culdoscopy or laparoscopy.

Toothed instruments such as Allis forceps used on the posterior wall of the uterus, have been criticized because torn tissues risk danger of hemorrhaging. This criticism is valid, but gentle manipulation minimizes the danger. No complications due to laceration of the tissues or hemorrhage were encountered.

Schuchardt perineotomy incisions, to obtain exposure, were not performed. To do so would defeat one of the advantages of the procedure; namely its simplicity, and it would increase the possibility of complications. For the same reason, anterior colpotomy is not advocated by the authors. It was performed in only three cases of the present series.

Summary

Posterior colpotomy is an often-neglected operation which can be an important aid in recognizing pelvic pathology. In addition to its value as a diagnostic adjunct, the procedure also is an approach for definitive pelvic surgery.

Three hundred seventy-one colpotomies were performed over a six-year period. In 91 of these patients, definitive therapy was accomplished through the vaginal incision. In 87.1 per cent of the colpotomies performed mainly for diagnostic purposes, a correct diagnosis was obtained.

References

1. Bissell, S.M.: Posterior Colpotomy for Diagnosis. *Western J. Surg. Obstet. Gynec.*, 70: 185, 1962.
2. Boilard, C.: La Colpotomie. *L'Union Med. du Canada*, 95: 767, 1966.
3. Bradbury, W.C.: Posterior Colpotomy. *Western J. Surg. Obstet. Gynec.*, 55: 1959.
4. Cherny, W.B., Wilbanks, G., and Peete, C.H., Jr.: The Management of Ectopic Pregnancy by Colpotomy, *South. Med. J.*, 55: 568, 1962.
5. Cole, G.R., Jr.: The Posterior Colpotomy. *J. Ark. Med. So.*, 63: 371, 1967.
6. Culton, Y.G., and Van Ostrand, J.R.: Colpotomy as a Definitive Operation in Ectopic Pregnancy. *J. Obstet. Gynec.*, 29: 279, 1967.
7. Daley, J., et al.: Culdoscopy, Colpotomy or Culdo-

The Viewbox

By Raymond S. Kurtzman, MD
Detroit

Doctors, expand your knowledge about radiology by studying this monthly column prepared by the chief radiologist at Detroit Memorial Hospital.

Diagnosis

Broncholith.

X-Ray Findings

There is segmental atelectasis of a portion of the right upper lobe. The body section radiographs (**Figure A** in the AP, **Figure B** in the lateral projection) show a small calcification at the origin of the segmental bronchus. There are several other calcifications more peripheral in the lung.

Discussion

Broncholithiasis is the result of erosion of a bronchus by a calcified granulomatous lymph node or by an old calcified granulomatous mass. Tuberculosis and histoplasmosis are the most common causes of this process, but they are not usually active when the bronchial stone becomes evident. When the broncholith erodes into a bronchus it can provoke bleeding, but most often they are simply coughed up and, surprisingly, usually ignored.

In parts of the country in which histoplasmosis is common it is not at all unusual to find patients who routinely "cough up chalk" and who see no reason for anyone either to be interested or concerned.

A broncholith can, however, occlude a bronchus and produce atelectasis which is frequently complicated by infection. Under these circumstances surgery is curative.

Doctor Kurtzman is an associate scientific editor of **Michigan Medicine.**

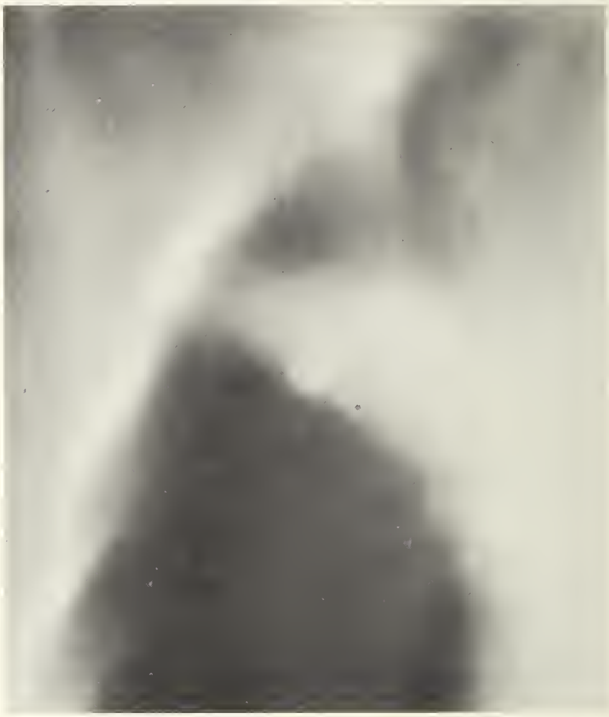


Fig. A

Fig. B

POSTERIOR COLPOTOMY/Continued

centesis as Diagnostic Procedures. Which One? *New Eng. Obstet. Gynec. Soc. Trans.* 14: 47, 1960.

8. Durfee, R.B.: Posterior Colpotomy Incisions in Gynecologic Disease. *JAMA* 134: April 4, 1959.
9. Kelly, H.S.: Treatment of Ectopic Pregnancy by Vaginal Puncture. *Bull. J. Hopkins Hosp.*, 7: 209, 1896.
10. Lang, W.R., and Wellenbach, B.L.: Colpocentesis, Colpotomy, Culdoscopy, and Colposcopy. *Clin. Obstet. Gynec.*, 2: 149, 1961.
11. Lee, R.A., Welch, J.S., and Spraitz, A.F., Jr.: Use of Posterior Culdotomy in Pelvic Operation. *Am. J. Obstet. Gynec.*, 95: 777, 1966.
12. Marchant, D.J.: Exploratory Culdotomy in Diagnosis of Adnexal Disease. *Clin. Obstet. Gynec.*, 17: 314, 1966.
13. McGowan, L.: Use of Posterior Colpotomy in the Diagnosis and Treatment of Pelvic Disease. *Obstet. & Gynec.*, 21: 108, 1963.
14. Smith, J.H., and Morris, J.A. Posterior Colpotomy: An Avenue for Definitive Pelvic Operations. *Am. J. Obstet. & Gynec.*, 79: 52, 1960.
15. Wooten, E.L.: Use of Posterior Colpotomy in the Diagnosis and Treatment of Ectopic Pregnancy and Other Lesions of the Pelvis. *Am. J. Obstet. & Gynec.*, 80: 727, 1960.

Alcoholic myopathy and myoglobinuric nephrosis

By R. Powers, MD
C. E. Thompson, MD
P. E. Schroeder, MD
Flint

Myoglobinuria is a relatively rare condition which has been reported in the "Crush Syndrome," muscular dystrophies, "Haff" Disease and McArdle's Disease.

It may follow electroconvulsive therapy, high voltage electrical injuries and certain infections, and has been reported after cardiac surgery and acute myocardial infarctions.[1-6] There also appears to be a primary myoglobinuria.[7-9]

Nutritional and biochemical abnormalities are common in the chronic alcoholic, but muscle disease is an unusual complication.[10-14] In 1955, Hed and associates in Sweden[5] described an acute myopathy in alcoholics which was characterized by muscular aching, tenderness on palpation and weakness of the extremities. Hyperpotassemia, increased serum glutamic oxalacetic transaminase and creatinine phosphokinase activity, myoglobinuria and nephrosis were described in some cases.

There have been few reports of this alcohol-induced syndrome in North America with insufficient emphasis on the insidious onset of the myopathy and the potential for recovery following adequate treatment.

The purpose of this paper is to describe a patient with acute alcoholic myopathy who was admitted to Hurley Hospital, Flint, Michigan, on two occasions, the first admission being complicated by acute renal failure due to myoglobinuria.

Case Report

Clinical History: A 36-year-old black male was admitted to Hurley Hospital for the first time on August 5, 1969. He gave a four-day history of vomiting, progressive weakness, pain and tenderness in all extremities, worse in the lower limbs. The patient began drinking at the age of seventeen and was admitted to another hospital for alcoholism in 1965 and 1967. There were no muscular symptoms associated with these admissions. For the two weeks prior to his present admission, he subsisted mainly on wine, averaging about two pints per day with little food intake. Four days prior to admission, he noticed vomiting and retching whenever he tried to eat. He denied taking drugs or other forms of alcohol and was otherwise asymptomatic. On the day of admission, he noticed his urine was dark. There was no family history of muscular or neurological disease.

Table I

Examination of serum enzymes (first admission)

Enzyme	SGOT	LDH	SGPT	CPK
Normals	5-40	100-550	5-35	0-35
Day 2				82
Day 3				94
Day 7	204	2390	90	
Day 8	129			
Day 9	72	1280		480

Physical Examination: The patient appeared acutely ill and was unable to stand unless assisted. The blood pressure was 160/100 mm. Hg., pulse was 100 per minute and temperature was 99°F. orally. There were no abnormalities of the heart or lungs. The liver was enlarged but there was no splenomegaly. The neurological examination revealed marked tenderness and weakness in the muscles of the calves, thighs, arms and legs. There was generalized and symmetrical hyporeflexia.

Laboratory and Special Examinations: The urine was dark brown, cloudy and acid. The specific gravity was 1.028 with a 4+ reaction for protein. There was a trace of glucose; tests for blood were strongly positive and the reactions for bile and ketones were negative. Serum calcium and phosphorus were 4.6 and 4.1 mEq. per liter respectively and serum potassium was 6.2 mEq. per liter. Serum sodium and chloride were within normal limits. Serum amylase and lipase were also normal. The urinary myoglobin taken on the fifth and seventh hospital days were 92 and 87 mg. per liter respectively, determined by the modified method of Theorell. (Normal urine myoglobin levels are under 4mg. per liter, using this method.) Serial enzymes were elevated and are illustrated in **Table I.**

A drip infusion IVP performed on the seventh

The authors are with the Department of Medicine at Hurley Hospital, Flint.

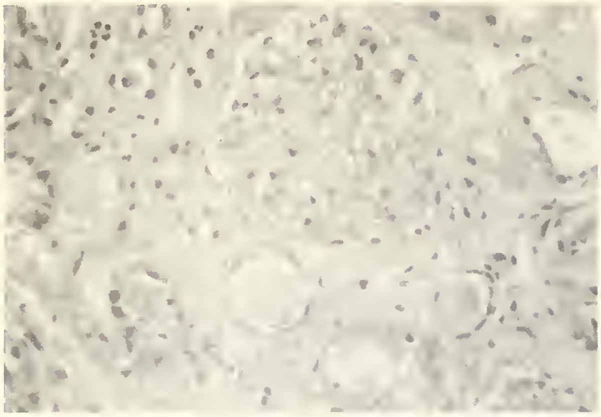


Fig. 1—A section of the gastrocnemius muscle biopsy reveals normal appearing striated muscle. There is an occasional atrophic fiber but these are probably no more than to be expected in normal muscle.

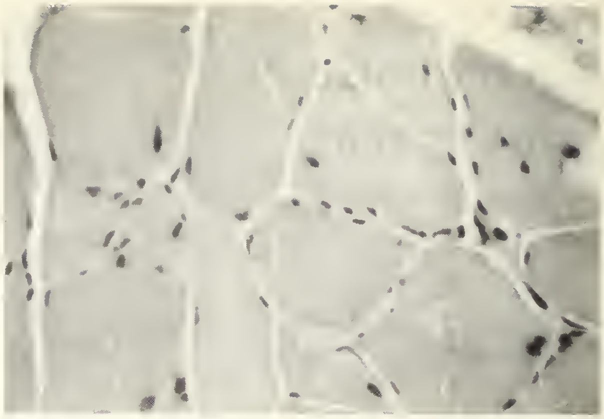


Fig. 2—A section of kidney shows the glomeruli are well preserved but there is a protein precipitate in Bowman's space. There is interstitial edema and eosinophilic staining cast throughout many of the tubules with epithelial degenerative changes noted.

hospital day when the BUN was 146 mg.% did not visualize the kidneys. A biopsy of the right gastrocnemius muscle done on the forty-third hospital day showed normal-appearing striated muscle **(Fig. 1)**. On the forty-fourth hospital day, the patient had a percutaneous renal biopsy which showed the glomeruli to be well preserved and a protein-like material was seen in Bowman's space which was presumed to be myoglobin **(See Fig. 2)**.

Course in Hospital: The renal status of this patient, before peritoneal dialysis was begun on the eleventh day, is shown in **Table II**. His improvement was gradual with a return to a normal renal profile on the twenty-ninth hospital day, as shown in **Table III**.

Eleven months after his first admission, the patient was again admitted with severe muscle pain, tenderness and weakness after a period of drinking heavily for one week. The urine was again dark brown and strongly positive for blood; the protein was 4+ and there were occasional red blood cells. The BUN was 25 mg.% and creatinine was 1.7 mg.%. The electrolytes were normal. Serial enzymes were elevated and are shown in **Table IV**.

The patient was given intravenous fluids and renal insufficiency did not occur. He made an uneventful recovery and was discharged on the seventeenth hospital day.

Discussion:

Alcohol-induced myoglobinuria is a readily recognizable, if unusual, condition in which progressive weakness and pain in the muscles develops after a large alcohol consumption. The elevated creatinine phosphokinase along with the glutamic oxalacetic transaminase and lactic dehydrogenase are principally due to skeletal muscle damage.[15-16]

The pathogenesis of alcoholic myopathy is obscure. Comprehensive enzyme and histochemical studies and further electron microscopic observations on skeletal muscle from these cases are needed. Many chronic alcoholics suffer from liver disorders and from nutritional deficiencies, which complicate attempts to define pathogenesis.

Among the possible pathogenetic mechanisms that may induce skeletal muscle damage in alcoholics are depression of the glycolytic enzymes by ethanol or one of its metabolities, or a more direct toxic effect of ethanol on the muscle cell membrane.[2] Another hypothesis is that it is due to a Vitamin E deficiency,[17] since Vitamin E deficient rats develop a similar myopathy. Fewings[18] postulated that prolonged oral ingestion of alcohol leads to peripheral vasoconstriction and chronic ischemia of skeletal muscle. Lynch[19] has postulated a primary disturbance of water and electrolyte metabolism in chronic alcoholics, leading to abnormal shifts of water and ions across cell membranes, with the possible secondary development of intracellular edema and cell damage. However, biochemical changes which may be related to abnormal muscle metabolism may be found in alcoholic patients without muscle complaints[20] and suggests that a spectrum of muscular abnormalities may exist. It is possible to distinguish between those with acute onset of symptoms, and myoglobinuria, and those with the insidious onset of symptoms and a more chronic course by histological examination. Klinkerfuss[21] reported segmental necrosis and extensive regeneration in the muscle biopsies from cases with the acute syndrome. In the chronic syndrome, biopsies showed only occasional focal areas of destruction with many small fibers separated by segmental fatty infiltration.

The present case report illustrates that the acute muscular syndrome, as well as the renal failure

Table II

Clinical Course Pre-Dialysis

Hosp. Day	BUN N-10-15 mg%	Intake/Output cc/24 hrs	Creatinine N-1-2 mg%
1	34.5	1950/640	
2	56	1100/139	8.2
4	95	1380/200	
5		2900/305	15.6
6	144.5	1536/118	
7	146	1525/161	18.0
8	150	1250/315	
10	168	515/120	18.2
11	216	(Peritoneal Dialysis Begun)	
12			
13			
14			

Table III

Clinical Course Post-Dialysis

Hosp. day	BUN	Intake/Output	Creatinine
15	83.5	1000/1300	18.4
16		1450/1770	16.8
17	127.0	875/3790	24.8
20	103	3000/3025	16.0
23	51.5		8.0
24	41.5		
26	26.5	2830/2625	
29	18.0		1.9
35	16.5	4040/2780	1.2

Table IV

Examination of serum enzymes (second admission)

Enzyme	SGOT	LDH	CPK	SGPT
Day 1	2120	7400	3405	
Day 3	1500	3500	2883	
Day 6	91	720	562	
Day 15	86	590		26

associated with alcoholic myoglobinuria, is reversible if treated. It is of interest that on the forty-fourth hospital day, the histology of the kidney was still abnormal despite normal tests of renal function, and on a subsequent admission he did not develop renal insufficiency in spite of high serial muscle enzyme levels.

Summary

A specific clinical condition in which heavy alcohol intake is followed by weakness and pain in the extremities, dark urine, hyperkalemia, and elevated levels of muscle enzyme, with progression to renal failure, is described. Urine myoglobins were elevated and a renal biopsy was abnormal. This condition appears to be reversible, if treated.

References

1. Valaitis, J., Pilz, C.G., Oliner, H., and Chomet, B.: Myoglobinuria, myoglobinuric nephrosis and alcoholism. *Arch. Path.* (Chicago) 70: 195, 1960.
2. Perkoff, G.T., Hardy, P., and Velez-Garcia, E.: Reversible acute muscular syndrome in chronic alcoholism. *New Eng. J. Med.* 274: 1277, 1966.
3. Kagan, L.J.: Immunologic detection of myoglobinuria after cardiac surgery. *Ann. Intern. Med.* 67: 1183, 1967.
4. Adams, E.C., and Elliott, T.A.: Urinary myoglobin in myocardial infarction. *JAMA* 211: 1013, 1970.
5. Hed, R., Larrson, H., and Wahlgren, F.: Acute myoglobinuria in alcoholism. *Acta Med. Scand.* 152: 459, 1955.
6. Simon, N.M., Rovner, R.N., and Berlin, B.S.: Acute myoglobinuria associated with type A2 (Hong Kong) influenza. *JAMA* 212: 1704, 1970.
7. Hinz, C.F., Drucker, W.R., and Larner, J.: Idiopathic myoglobinuria. *Amer. J. Med.* 39: 49, 1965.
8. Leonard, C.C., Eichner, E.R.: Acute renal failure and transient hypercalcemia in idiopathic rhabdomyolysis. *JAMA* 211: 1539, 1970.
9. Tavill, A.S., Evanson, J.M., Baker, S.B. de C., Hewitt, V.: Idiopathic paroxysmal myoglobinuria with acute renal failure and hypercalcemia. *New Eng. J. Med.* 271: 283, 1964.
10. Ratnoff, O.D., Patek, A.S., Jr.: The natural history of Laennec's cirrhosis of the liver. *Medicine* (Balt.) 21: 207, 1942.
11. Victor, M., Adams, R.D.: On the etiology of the alcoholic neurologic diseases with special reference to the role of nutrition. *Amer. J. Clin. Nutr.* 9: 379, 1961.
12. Brigden, W.: Uncommon myocardial disease, the non-coronary cardiomyopathies. *Lancet* 2: 1179, 1959.
13. Sullivan, L.W., Herbert, V.: Suppression of hematopoiesis by ethanol. *J. Clin. Invest.* 43: 2048, 1964.
14. Freinkel, N., Singer, D.L., Arky, R.A., Bleicher, S.J., Anderson, J.B., Silbert, C.K.: Alcohol hypoglycemia I. Carbohydrate metabolism of patients with clinical alcohol hypoglycemia and the experimental reproduction for the syndrome with pure ethanol. *J. Clin. Invest.* 42: 1112, 1963.
15. Hess, J.W., MacDonald, R.P., Frederick, R.J., Jones, R.N., Neely, J., and Gross, D.: Serum creatine phosphodinase (CPK) in disorders of heart and skeletal muscle. *Ann. Intern. Med.* 61: 1015, 1964.
16. Nygren, A.: Serum creatine phosphodinase activity in chronic alcoholism, in connection with acute alcohol intoxication. *Acta Med. Scand.* 179: 623, 1966.
17. Pappenheimer, A.M.: *On certain aspects of Vitamin E deficiency.* Thomas, Springfield, Ill. 1948.
18. Fewings, J.D., Hanna, M.J.D., Walsh, J.A., and Whelan, R.F.: The effects of ethyl alcohol on the blood vessels of the hand and the forearm in man. *Brit. J. Pharmacol.* 27: 93, 1966.
19. Lunch, P.G.: Alcoholic myopathy. *J. Neurol. Sci.* 9: 449, 1969.
20. Perkoff, G.T., Dioso, M.M., Bleisch, V., and Klinkerfuss, G.: A spectrum of myopathy associated with alcoholism. I. Clinical and laboratory features. *Ann. Intern. Med.* 67: 481, 1967.

The following is an abstract presented at a recent meeting of the Detroit Surgical Association.

Fistulas and diverticulitis

By J. Boutrous, MD
R. D. Allaben, MD
A. A. Kambouris, MD
W. S. Carpenter, MD
Detroit

We have reviewed 90 cases of sigmoid diverticulitis requiring surgery and found that 15 of these patients developed some type of sigmoid fistula. Five varieties of fistulae were encountered in our work, with the sigmoidovesical type being the most common, occurring in 8 of the 15 patients.

Methods of diagnosis and symptomology are well known, but surgical treatment is quite controversial.

Our experience with this complication of diverticulitis has led us to the conclusion that one-stage resection of the appropriate portion of bowel with end to end anastomosis is the procedure of choice. However, the finding of a fistula is not a surgical emergency. When a case is complicated by abscess or perforation, colostomy with subsequent staged resections is advocated.

We perform one-stage resections whenever possible. In order to avoid recurrence the lower level of the resection must extend at least to and at times below the level of the pelvic floor.

In our series 8 of the 15 patients were treated with one-stage resection and anastomosis. Our results were quite gratifying. We had no surgical mortality and our morbidity was restricted to two wound infections, two incisional hernias and one case of serum hepatitis.

ALCOHOLIC MYOPATHY/Continued

21. Klinkerfuss, G., Bleisch, V., Dioso, M.M., and Perkoff, G.T.: A spectrum of myopathy associated with alcoholism. II. Light and electron microscopic observation. *Ann. Intern. Med.* 67: 493, 1967.
22. Schneider, R.: Acute alcoholic myopathy and myoglobinuria. *South. Med. J.* 63: 485, 1970.
23. Ekbom, K., Hed, R., Kirstein, L., Anstrom, K.E.: Muscular affections in chronic alcoholism. *Arch. Neurol.* (Chicago) 10: 449, 1964.
24. Hed, R., Lundmark, C., Fahlgren, F., and Orell, S.: Acute muscular syndrome in chronic alcoholism. *Acta Med. Scand.* 171: 585, 1962.
25. O'Brien, E.T., Goldstraw, P., Alcoholic myopathy. *Brit. Med. J.* 4: 785, 1969.
26. Muller, P., Regli, F., and Myer, M.: Alcoholic myopathy. *Germ. Med. Month.* 13: 511, 1968.
27. Douglas, R.M., Fewings, J.D., Casley-Smith, J.R., and West, R.F.: Recurrent rhabdomyolisis precipitated by alcohol: A case report with psysiological and electron microscopic studies of skeletal muscle. *Aust. Ann. Med.* 70: 799, 1966.

A simple cardiodynamic assessment of *mitral insufficiency*

By Gerald C. Timmis, MD
Seymour Gordon, MD
Renato G. Ramos, MD
Detroit

Myocardial performance is difficult to assess in unloaded states such as mitral insufficiency. The conclusion that it may be relatively normal is based on the frequent observation of asymptomatic patients with advanced regurgitation. Whether or not myocardial function may also be normal in symptomatic patients has not been accurately determined.

Recent work by Eckberg, et al.[1] at the University of California suggests that circulatory deterioration may be primarily due to the hemodynamic load whereas in others the additional factor of myocardial impairment exists. Their measurements, however, utilizing high speed cineradiographic techniques requiring electrocardiographic and pressure synchronization, involved a technique which is expensive, time-consuming and not generally available in most cardiac laboratories.

While it was recognized, therefore, that hemodynamic and cardiodynamic parameters available in the usual catheterization laboratory cannot be construed without simultaneously obtained absolute volumetric measurements as indicative of myocardial performance in mitral insufficiency, their possible usefulness as indices of its severity was evaluated.

Methods

Four patients with mild mitral insufficiency and eight patients with severe insufficiency (12 in all) were studied and compared to 14 patients without evidence of left ventricular disease. The latter included one patient with an atrial septal defect and seven with isolated mitral stenosis. In the insufficiency one patient had an associated Grade I aortic insufficiency and four mild to moderate mitral stenosis. Etiology of those with mitral insufficiency was assumed to be rheumatic in 11 and idiopathic in one on the basis of historical and clinical evidence (**Table I**). The cardiac function of two in the mild group and 6 with severe mitral insufficiency was classified as III to IV according to New York Heart Association criteria.[2] The remainder were in Class II (except for one Class I in mild group). Patients with left ventricular pressures exceeding 150 mm.Hg. and aortic diastolic pressures of 100 mm.Hg. were excluded from the study because of a positive influence on pre-ejection mitral insufficiency. Three controls (all with mitral stenosis) and three with mitral insufficiency were in atrial fibrillation. Data were analyzed by the Student t test for small samples.

The following variables were measured: cardiac index (CI), effective (forward) stroke index (ESI), left ventricular and aortic pressures and maximum left ventricular rate of pressure rise (dP/dt). Effective stroke index and maximum dP/dt were compared to left ventricular end-diastolic pressure (LVEDP). Maximum dP/dt was also compared to aortic diastolic pressure (ADP).

Flows were calculated by the method of Fick. Pressures were recorded through conventional cardiac catheters utilizing P23 Db Statham transducers and a DR-8 Electronics for Medicine preamplifier and recording system. Maximum left ventricular dP/dt was determined utilizing an Electronics for Medicine resistance-capacitance differentiating circuit. This system was demonstrated by Knopp, et al., to measure 95% of the energy components of significance at 15 cycles per second or less even with higher heart rates and yields satisfactory accuracy as compared to catheter-tip micromanometers in the dP/dt ranges recorded in the study.[3] Because four patients were in atrial fibrillation, measurements where possible were made during the intermittent and random regularization characteristic of this arrhythmia because of a demonstrated rate-dependent variability of the inotropic state in atrial fibrillation.[4] The severity of mitral insufficiency was angiographically determined as described by Amplatz, et al., and Bjork, et al.[5,6] A visual estimate of left ventricular myocardial contractility was made when films were adequate (**Table I**).

Doctor Timmis and Doctor Gordon are co-directors of the Division of Cardiology at William Beaumont Hospital, Royal Oak, and of the Cardiovascular Laboratory, Harper Hospital, Detroit. Doctor Ramos is associated with the cardiology divisions of Beaumont and Harper.

Table I

Clinical Material

Group Initials	Age (yrs)	Sex	Rhythm	Etiology of disease	NYHA Class.	Assoc. Valv. Lesions	Visual Estimate of Contractility
Controls							
RB	20	M	NSR	Congenital	—	—	—
JW	16	M	NSR	—	—	—	—
GN	18	F	NSR	—	—	—	—
VM	56	M	NSR	—	—	—	—
ML	40	F	NSR	—	—	—	—
KE	18	F	NSR	—	—	—	—
EB	52	F	NSR	—	—	—	—
LC	58	F	AFi	RHD	—	MS	—
AG	38	M	NSR	RHD	—	MS	—
AL	47	M	NSR	RHD	—	MS	—
LM	39	F	NSR	RHD	—	MS	—
LS	24	F	NSR	RHD	—	MS	—
EF	47	F	AFi	RHD	—	MS	—
EW	46	M	AFi	RHD	—	MS	—
Mild MI							
JS	55	M	NSR	Idiopathic	IIB	—	Normal
WE	38	M	AFi	RHD	IVD	MS	Impaired
RR	42	F	NSR	RHD	IB	—	Normal
SM	55	M	NSR	RHD	IIIC	MS	Normal
Severe MI							
DB	49	F	NSR	RHD	IIIC	—	—
KH	19	F	NSR	RHD	IVD	MS	Normal
EK	41	F	NSR	RHD	IVE	—	Impaired
HM	56	M	AFi	RHD	IIIC	—	Normal
RR	46	M	NSR	RHD	IIIC	—	Normal
JK	54	M	NSR	RHD	IIB	—	—
VS	53	F	NSR	RHD	IIB	AI(I)	Impaired
GS	65	F	AFi	RHD	IVD	MS	Impaired

Table II

Cardiodynamic Data

	ECI (1/min/m^2)	ESI (cc/m^2)	LVEDP (mm Hg)	LV dP/dt(max) (mm Hg/sec)	$\frac{dP/dt(max)}{MIP}$	$\frac{ESI}{LVEDP}$	$\frac{dP/dt(max)}{LVEDP}$
	2.69	33.6	6	1820	22.20	5.60	303.3
	2.99	39.9	10	1680	21.00	3.99	168.0
	2.53	43.6	4	1344	23.17	10.90	336.0
	2.16	23.0	9	2460	32.37	2.56	273.3
	4.44	74.0	12	2260	30.13	6.17	188.3
	1.80	22.5	11	1320	16.50	2.05	120.0
	3.53	29.9	6	2080	27.37	4.98	346.7
	2.52	33.6	5	1872	26.74	6.72	374.4
	3.48	51.9	6	2378	36.03	8.65	396.3
	2.90	39.2	11	1840	23.00	3.56	167.3
	1.86	32.1	11	1312	24.30	2.92	119.3
	1.66	24.4	4	1296	25.92	6.10	324.0
	3.14	34.9	6	1692	22.26	5.82	282.0
	1.49	17.5	7	1787	21.27	2.50	255.3
Mean	2.66	35.7	7.7	1795	25.16	5.18	261.0
S.D.	0.83	14.3	2.8	394	5.10	2.52	93.3
	2.37	39.5	9	1120	18.67	4.39	124.4
	2.01	29.1	8	1600	22.86	3.64	200.0
	2.77	38.5	12	1968	30.75	3.21	164.0
	2.13	28.4	10	1640	20.50	2.84	164.0
Mean	2.32	33.9	9.8	1582	23.20	3.52	163.1
S.D.	0.34	5.9	1.7	349	5.32	0.67	30.9
	2.43	27.0	10	1404	21.27	2.70	140.4
	3.69	49.2	9	960	12.80	5.47	106.7
	1.80	17.1	35	1804	20.98	0.49	51.5
	2.15	20.5	8	1564	22.34	2.56	195.5
	3.00	37.5	17	1250	21.93	2.21	73.5
	2.66	29.4	13	2496	29.71	2.26	192.0
	2.18	40.4	12	1755	27.42	3.37	146.2
	1.71	29.5	14	1352	19.31	2.11	96.6
Mean	2.45	31.3	14.8	1573	21.97	2.65	125.3
S.D.	0.66	10.6	8.7	462	5.10	1.40	52.6

Abbreviations: ECI=Effective Cardiac Index; ESI=Effective Stroke Index;
LVEDP=Left Ventricular End-Diastolic Pressure;
dP/dt(max)=Maximum Rate of Pressure Rise in the Left Ventricle;
MIP=Aortic Diastolic Pressure; NSR=Normal Sinus Rhythm;
AFi=Atrial Fibrillation; RHD=Rheumatic Heart Disease;
MS=Mitral Stenosis; AI=Aortic Insufficiency;
NYHA Class.=New York Heart Association Criteria for Cardiac Dysfunction

Results:

The findings are enumerated in **Table II**. The cardiac index varied insignificantly between the three groups. This is consistent with previously published data that notwithstanding regurgitant volumes exceeding 30 liters per minute, effective cardiac indices may be maintained within the normal range.[7] Similarly, effective stroke index did not vary significantly between the three groups. The ratio of ESI to LVEDP differed significantly only in severe mitral insufficiency ($p<0.01$). Maximum left ventricular dP/dt did not vary significantly between the three groups (**Figure 1**). The same was true of the ratio of dP/dt to aortic diastolic pressure (ADP) which was 25.16, 23.20 and 21.97 respectively in the three groups. Left ventricular end-diastolic pressure, however, progressively increased but was statistically significant only in the severe group ($p<0.01$). The ratio of maximum dP/dt to LVEDP, however, varied significantly from the controls in both those with mild ($p<0.05$) and severe ($p<0.0025$) mitral insufficiency (**Figure 2**).

Figure 3 is a scattergram of the ratio of maximum dP/dt to LVEDP in the three groups. It reveals a significant difference in both the mild and severe mitral insufficiency groups as compared to the control group, while an insignificant difference was noted between the mild and severe group. Seventy-five percent of the latter, however, had a ratio of less than 150 while 75% of the mild group had ratios exceeding 160.

Discussion

While the group of controls is biased toward lower cardiac outputs by virtue of the inclusion of seven patients with mitral stenosis, the basis for using them as controls is that left ventricular performance as determined by myocardial contractility has been reported to be within normal limits.[15,16] Moreover, an index of mitral insufficiency to be clinically useful must vary not only from normal but also from other cardiac lesions.

The ratio of ESI to LVEDP varied significantly from controls only in severe mitral insufficiency. It did not, however, relate as well on an individual basis to the severity of mitral insufficiency as did the ratio of dP/dt (max) to LVEDP. This is reflected in the greater standard deviation in all three groups, especially controls and the severe MI group (**Table II**). Moreover, the decrease in ESI/LVEDP in severe MI cannot be interpreted as indicative of impaired myocardial performance[8] since, as indicated by Frank, et. al., ESI in severe mitral insufficiency may represent less than 30% of the total stroke index.[7] The same discriminatory deficiency existed for LVEDP on an individual basis.

Variations in left ventricular end-diastolic pressure and volume are the dominant influence, independent of inotropic state, on maximum dP/dt.[9] Parmley and Sonnenblick reported that a stiffer series elastic resulting from an increased preload produced an increment in maximum LV dP/dt.[10] Nevertheless, an increase in LV dP/dt was not observed in this study in association with increments in left ventricular end-diastolic pressure. On the contrary, a statistically significant decrement in maximum LV dP/dt per LVEDP was shown in both the mild and severe groups (**Figure 2**). The latter was at least in part due to pre-ejection left ventricular emptying with a reduction in left ventricular impedance offsetting the effect of increased left ventricular end-diastolic pressure in mitral insufficiency. The effect of a reduction in ventricular impedance on the size of the dP/dt was suggested as early as 1921 by Hartree and Hill.[11] This ventricular "unloading" in severe mitral insufficiency begins in the pre-ejection phase of systole. Some investigators report that up to 40% of mitral insufficiency occurs before aortic ejection.[12] Left ventricular dP/dt is best evaluated during isovolumetric contraction because maximum contractile element shortening is achieved during this time and therefore declines.[13,14] However, if the isovolumetric period exists at all in mitral insufficiency, it is significantly abbreviated. Therefore, ventricular emptying may occur before development of maximum intensity of the active ventricular state so that the full capacity of the left ventricular muscle may not be measurable from isovolumetric events.[15]

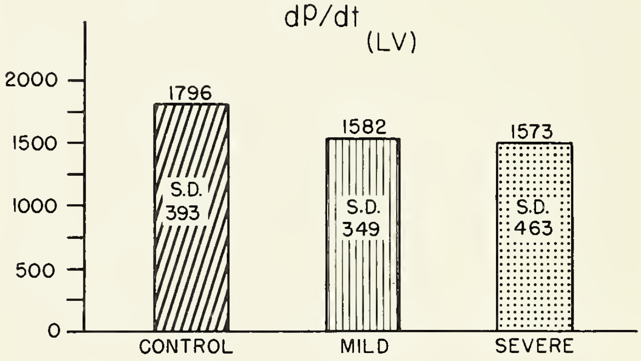


Figure 1. Comparison of maximum left ventricular dP/dt. No significant difference was observed.

The dP/dt in mitral insufficiency is a complex measurement reflecting the algebraic sum of a number of influences independent of myocardial contractility. It cannot, therefore, be interpreted as reflecting myocardial function with this par-

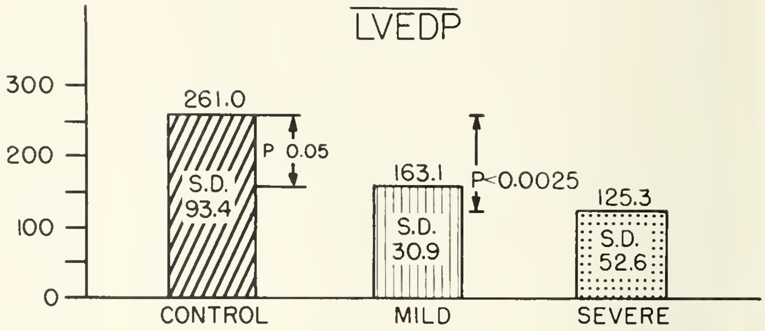


Figure 2. Ratio of maximum left ventricular dP/dt to left ventricular end-diastolic pressure. The statistically significant difference exists in the groups with both mild and severe mitral insufficiency.

ticular valvular defect. At the present time, no reliable method for assessment of myocardial performance utilizing dP/dt free of the simultaneous influence of preload and afterload is available.

While inaccurately reflecting myocardial contractility, the ratio of maximum dP/dt to LVEDP was found to be clinically useful as a nonangiographic index of the severity of mitral insufficiency. **Figure** 3 reveals a statistically significant difference in both the mild and severe insufficiency groups as compared to controls. While an insignificant difference exists between the mild and severe group, 75% of the latter had a ratio of less than 150 while 75% of the mild group had ratios exceeding 160. If those controls with a cardiac index of less than 2L/min/m^2 are excluded, none had a ratio less than 160. While the ratio tended to reflect LVEDP in the severe group, three with normal filling pressures had a decreased ratio while one with an increased filling pressure had a normal ratio. This ratio, therefore, while not useful as a cardiodynamic index of myocardial contractility appears to correlate hemodynamically with the severity of mitral insufficiency.

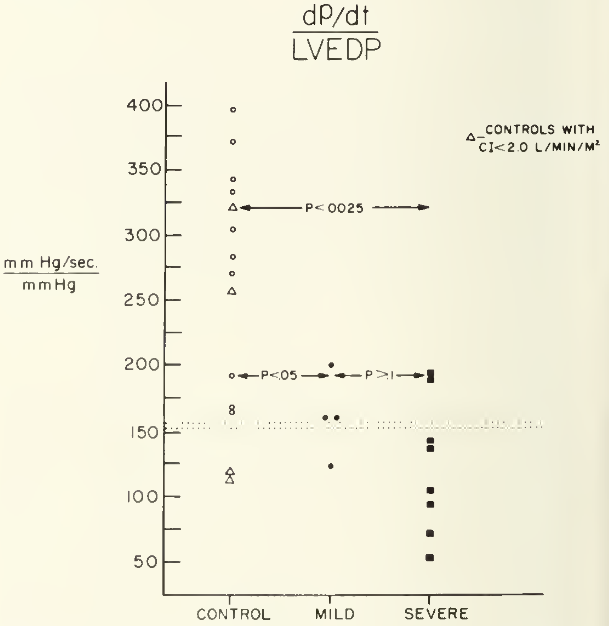


Figure 3. Scattergram of individual ratios of maximum left ventricular dP/dt to left ventricular end-diastolic pressure. See text.

Summary

A simple method of assessing the severity of mitral insufficiency is reported. The hemodynamic and cardiodynamic performance of four patients with mild mitral insufficiency and eight with severe mitral insufficiency was compared to 14 controls without evidence of left ventricular disease. Measurement of effective cardiac index, effective stroke index and maximum left ventricular dP/dt failed to discriminate between these groups. The ratio of effective stroke index to left ventricular end-diastolic pressure was significantly less in severe mitral insufficiency but could not be considered as an index of myocardial impairment since effective stroke volume substantially does not reflect total stroke work in severe MI. The ratio of maximum LV dP/dt to LVEDP varies significantly in both those with mild and severe mitral insufficiency. Since a potential in reduction of dP/dt because of pre-ejection left ventricular emptying in severe mitral insufficiency is probably offset to some degree by the effect of an increased LVEDP, maximum left ventricular dP/dt cannot be interpreted in terms of myocardial function. At the present time, no reliable method for assessing the myocardial performance utilizing dP/dt free of both simultaneous influence of preload and afterload is available. However, the ratio of maximum LV dP/dt to LVEDP discriminates in at least 75% between mild and severe mitral insufficiency.

References

1. Eckberg, D.L., Bouchard, R.J., and Gault, J.H.: Left ventricular performance in severe mitral insufficiency. Circulation 40 Suppl. III: 74, 1969.
2. Criteria Committee of the New York Heart Association Inc.: Diseases of the heart and blood vessels (Nomenclature and criteria for diagnosis). Boston, Little, Brown and Co., 1964.
3. Knopp, T.J., Rahimtoola, S.H., and Swan, J.H.: First derivative of ventricular pressure recorded with conventional cardiac catheters. (Abstract), Circulation 32 Suppl. II: 128, 1965.
4. Edmands, R.E., Greenspan, K., and Fisch, C.: Ventricular function in atrial fibrillation: A variable inotropic state. (Abstract), *Amer. J. of Cardiol.* 23: 110, 1969.
5. Bjork, V.O., Lodin, H., and Malers, E.: Evaluation of the degree of mitral insufficiency by selective left ventricular angiocardiography. *Amer. Heart J.* 60: 691, 1960.
6. Amplatz, K., Lester, R.G., Ernst, R., and Lillihei, D.W.: Left retrograde cardioangiography: Its diagnostic value in acquired and congenital heart disease. *Radiology* 76: 393, 1961.
7. Frank, M.J., Nadimi, M., Hilmi, I., and Levinson, G.E.: Measurement of mitral regurgitation in man by the upstream sampling method using continuous indicator infusions. Circulation 35: 100, 1967.
8. Ross, J., Gault, J.H., Mason, D.T., Linhart, J.W., and Braunwald, E.: Left ventricular performance during muscular exercise in patients with and without cardiac dysfunction. Circulation 34: 597, 1966.
9. Reeves, T.J., Hefner, L.L., Jones, W.B., Coghlan, C., Prieto, G., and Carroll, J.: The hemodynamic determinants of the rate of change in pressure in the left ventricle during isometric contraction. *Amer. Heart J.* 60: 745, 1960.
10. Parmley, W.W., and Sonnenblick, E.H.: Series elasticity in heart muscle: Its relation to contractile element velocity and proposed muscle models. Circulation Research 20: 112, 1967.
11. Hartree, W., and Hill, A.V.: The nature of the isometric twitch. *J. of Physiology* 55: 389, 1921.
12. Ibid.[1]
13. Levine, H.J., and Britman, N.A.: Force-velocity relation in the intact dog heart. *J. of Clin. Invest.* 43: 1383, 1964.
14. Ross, J., Covell, J.W., Sonnenblick, E.H., and Braunwald, E.: Contractile state of the heart characterized by force-velocity relations in variably afterloaded and isovolumic beats. Circulation Research 18: 449, 1966.
15. Frank, M.J., and Levinson, G.E.: An index of the contractile state of the myocardium of man. *J. of Clin. Invest.* 47: 1615, 1968.
16. Hermann, J.H., Singh, R., and Dammann, J.F.: Evaluation of myocardial contractility in man. *Amer. Heart J.* 77: 755, 1969.

Please send reprint requests to Gerald C. Timmis, MD, William Beaumont Hospital, 4601 W. Thirteen Mile Road, Royal Oak, 48072.

Perinatal Tips

By Paul M. Zavell, MD
Detroit

Maternal

This was the fourth pregnancy of this gravida IV, para III 36 year old white mother. Her three other children are alive and well. She is A+ and went through this pregnancy to 36 weeks uneventfully. She had received monthly prenatal care.

At 36 weeks of pregnancy she developed a cold with running nose, sore throat and spasmodic cough. She was seen three times at weekly intervals thereafter and although her pregnancy seemed unaffected she continued with her symptoms.

Her obstetrician did several blood tests (CBC's) but all were reported as normal. He treated her with TAO 250 mgm q.i.d. for five days when he saw her at 36 weeks with the cold. This was followed at 37 weeks with one week of Declomycin 300 mgm b.i.d. However, this seemed to make no difference to her cold.

She went into labor at 39 weeks and after 10 hours, 33 minutes delivered a white female infant. The mother's B.P. ranged 126-120/90-80 and she had a trace of albumin in the urine on two occasions. Her weight gain was 28 lbs. (It was learned after she delivered that two of her children also had a cold similar to the one she had but they were said to be "viral" by the pediatrician and no specific treatment was given.)

Fetal

This seven pound, three ounce, white, female infant was born with an Apgar of 8 at 1 minute and 10 at 5 minutes. Initial physical exam was negative. However, at six hours of age a stuffy nose was noted and the infant developed a stuffy-mucusy nose with occasional choking and coughing episodes in the next 48 hours. Nose and throat cultures were done revealing "normal flora" with a few Staph aureus organisms. These were considered "contaminants." However, to play it safe the infant was treated with Ilosone-Pediatric Drops and slowly improved. Some mucus and occasional cough persisted even to discharge at five days of age.

On the tenth day of life the mother callen the pediatrician because the infant had "rolled off" her dressing table onto the soft-carpeted floor. She was reassured and told to look for concussion symptoms such as vomiting, drowsiness or irritability. It was also noted at this time that the head cold had not cleared.

On the 15th day the infant had a brief cyanotic episode thought to be due again to mucus and since she got "well" quickly the pediatrician was not called.

The cold symptoms persisted however and were now treated at home with Triaminic drops, honey-lemon-whiskey and nasal suction (all prescribed over the phone—the Ilosone Pediatric Drops having been finished some time ago).

On the morning of the 21st day the infant was found in her vomitus very pale and almost unresponsive. She was rushed to her pediatrician's office but expired before she arrived there. The doctor felt the infant probably died from aspiration.

A postmortem was done revealing acute interstitial pneumonitis, splenitis and enteritis in a patient with primary endocardial fibro-elastosis of the left atrium and ventricle.

Perinatal Committee Comments

1. There is no real sense in treating "colds" with antibiotics. Unless there is a secondary bacterial infection the antibiotics are valueless against the viral infection.
2. When "colds" are complicated by bacterial infection very frequently this infecting agent is H. Influenza. When present (use culture of throat) ampicillin is of value.
3. Both T.A.O. and Declomycin are rarely drugs of choice in a pregnant woman and each has potential toxic effects to both mother and infant.
4. Persistent mucus and cough in the newborn period is not normal. Such infants should be seen and examined carefully as to cause(s).

Doctor Zavell is chairman, Neo-Natal and Hospital Care Committee, Michigan Chapter, A.A.P., and chairman, Perinatal Mortality Study Committee, Wayne County Medical Society.

Energy balance in the newborn baby:

Aspects of care for the community hospital

By Thomas A. Helmrath, MD
East Lansing

The high risk infant who experiences cold stress following birth, has an increased mortality rate when compared to similar infants maintained in neutral thermal conditions.[1] What is not known is the incidence of mental retardation secondary to excessive energy expenditures in those surviving high risk infants. Some principles of energy utilization need to be understood for nursery and delivery room personnel in the community hospital to implement techniques to conserve heat and restore energy balance. This article is a review of the energy expenditures, both basal and those derived from routine care, and the fuels available to the infant to meet his expenditures. In this discussion, energy refers to the fuels consumed by the body to meet the total caloric needs. The fuels are glucose and its breakdown products, FFA, and ketone bodies.

* * *

The intrauterine temperature in which the fetus develops is only slightly cooler than that of the fetus. At birth, the fetus is violently expelled into an environment considerably cooler, and the baby responds to this cold stress by adaptations which attempt to conserve and generate heat.

Before considering the metabolic responses the newly born baby makes because of this stress, we should first consider his basal energy needs. By studying the amounts of oxygen consumed immediately following birth and during the first hours of life while in a neutral thermal state, basal energy needs have been determined to be approximately 35 K cal/Kg/day.[2] The calculated calories per day needed to meet the basal needs of an infant of 1.5 and 3 Kg are shown in **Table 1.** The basal requirement represents the energy needed to maintain cellular function, movement of blood, formation of urine, and establishment of osmotic gradients. The lower row of figures in **Table 1** are the calculated caloric requirements for infants who are delivered and cared for in the current routine manner. The increase in caloric requirements over the basal state are due to the effects of cold exposure and physical activity.

It is well known that the newly born infant is quite sensitive to cold and will increase his metabolic rate in order to meet his increased heat loss.[3] The premature infant will also respond to cold stress by increasing his metabolic rate, but this ability is easily overwhelmed. A drop in rectal temperature (core temperature) occurs when the adaptive responses have failed to meet the increased demands.

Some of the factors operative in the delivery room which influence the loss of heat are in **Table 2.** For an infant, the combination of a large surface area to mass and being born wet into a cold delivery room produce a massive cold stress. We compound this stress, following the initial insult, by giving the infant a bath which serves as an additional source of heat loss.

The total effect of these factors have been documented in the study by Miller and Oliver.[4] Full term infants with Apgar scores of 7 or above

ENERGY EXPENDITURE
1 st DAY OF LIFE

	CALORIES / DAY	
BASAL OXYGEN CONSUMPTION	1.5 Kg	3 Kg
5 ml / Kg / MIN	52	103
OXYGEN CONSUMPTION WITH ROUTINE CARE 8 ml / Kg / MIN	78	156

Table 1

FACTORS IN HEAT LOSS

SURFACE AREA TO MASS RATIO

WET SURFACE

COLD DELIVERY ROOM

BATH FOLLOWING DELIVERY

Table 2

Presented in part at the Tenth Annual Michigan Conference on Maternal and Perinatal Health, Lansing, Michigan.

Doctor Helmrath is assistant professor, Department of Human Development, Michigan State University.

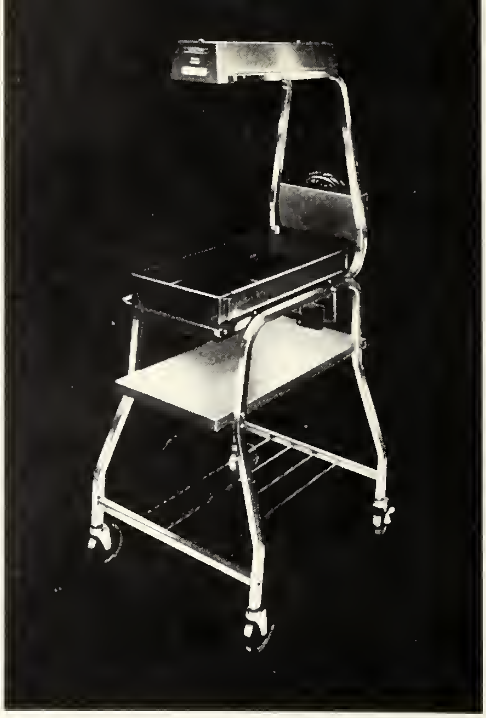


Figure 1.—Commercial radiant heat source for the nursery and the delivery room.

at one minute were studied. In the "A" group, infants were not dried following delivery. Identification procedures were implemented along with eye care prior to wrapping in a blanket, the infant was then taken to the nursery and given a bath. The "B" group was managed identically, but no bath was given. The "C" group, immediately following delivery, were placed in an Isolette* in which routine care was given; and received no bath. The mean rectal temperatures for each group at 1, 2, and 3 hours of age are found in **Table 3**.

Four modes of heat loss are operative in the newly born infant. Heat loss by convection is a function of the difference between skin temperature and air temperature and the rate of air flow. Conductive heat loss occurs by direct physical contact with a cooler object. Radiant heat loss, which accounts for ⅔ of the total, is the loss to cooler objects in the environment. Evaporative heat loss accounts usually for only 10-15% of the total, except in situations such as at birth or during a bath, where losses are considerably greater.

In addition to caloric expenditure in response to cold, the infant also consumes fuels with physical activity. Physical activity increases whenever the infant experiences cold, so both frequently occur simultaneously.

Calculations of the infant's potential caloric sources to meet the previously mentioned needs are shown in **Table 4**. The calories listed under Endogenous Sources represent the theoretical calories available to infants if they were able to convert all their glycogen to glucose. In actuality, only about 60% of the calories listed would be available. Exogenous sources include the calories available from various combinations of oral and intravenous feedings. As an example, if a 1.5 Kg premature is given one 5% D/W feeding (10cc) at 12 hours, he would receive only 15 calories that day. If we add 60% of his potential glycogen calories to that, a total of 45 calories are available, which is well short of his basal needs of 52 calories. A similar calculation using 20 cal formula (52 cal) and 24 cal formula feeding (56 calories) reveal that they both would just cover basal needs. In the 3 Kg infant, basal needs can be met by 13 or 20 cal formula and by consumption of all of his glycogen stores, but this is still short of his needs with routine care. The caloric deficits that may occur with either intravenous 5 or 10% glucose are readily apparent. Thus, routine exogenous sources in the first day, either oral or intravenous, usually do not meet the caloric expenditures of the infant nursed by the current methods.

By removing the last three factors listed in **Table 2**, (wet surface, cold delivery room, bath), it is possible to allow the infant to utilize calories for useful work rather than just to generate heat. Drying the infant completely following delivery and then placing him under one of the available commercial radiant heat sources, as shown in **Figure 1**, will prevent significant heat loss.[5] Bathing the infant only after his rectal temperature has stabilized (8-12 hours of age), will also remove the extra stress during the critical adaptive stage following delivery. Additional calories can be made available by using formulas which provide greater quantities of calories per unit of volume, since it is known that prematures can absorb the extra nutrients found in 20 and 24 calories per ounce formulas. Last, we advocate the use of intra-

---

*Air Shields—Hatboro, Pennsylvania

RECTAL TEMPERATURE (°C.)					
		AGE (HOURS)			
	BIRTH	1	2	3	6
GROUP 'A'	36.8	34.6	35.2	35.5	36.1
GROUP 'B'	36.8	35.1	35.4	35.7	36.0
GROUP 'C'	37.0	36.0	36.2	36.4	36.6

Table 3

ENERGY INPUT		
	CALORIES AVAILABLE	
ENDOGENOUS SOURCES	1.5 Kg INFANT	3 Kg INFANT
LIVER & SKELETAL MUSCLE GLYCOGEN	52	100
EXOGENOUS SOURCES		
ORAL		
5 % D / W (12 HRS)	2 (10 cc)	6 (30 cc)
13 CAL FORMULA (3X)	13 (30 cc)	52 (120 cc)
20 CAL FORMULA (3X)	20 (30 cc)	80 (120 cc)
24 CAL FORMULA (3X)	24 (30 cc)	
INTRAVENOUS SOURCES		
5 % (65 cc / Kg / 24 HRS)	20	40
10 % (65 cc / Kg / 24 HRS)	40	80

Table 4

venous 10% glucose solutions instead of 5% for the newly born infant who requires parental treatment for obvious caloric reasons.

References

1. Bueton, K.C., and S.W. Klein: Effect of maintenance of "normal" skin temperature on survival of infants of low birth weight. *Pediatrics* 34:163, 1964.
2. Hill, J.R., and K.A. Rahimtulla: Heat balance and the metabolic rate of newborn babies in relation to environmental temperature; and the effect of age and weight on basal rate. *J. Physiology* 180:239, 1965.
3. Grausz, J.P.: The effects of environmental temperature change on the metabolic rate of newborn babies. *Acta Paediat Scand.,* 57:98, 1968.
4. Miller, D.L., and T.K. Oliver, Jr.: Body temperature in the immediate neonatal period: The effect of reducing thermal losses. *Amer. J. Obst. Gyn.,* 94: 964, 1966.
5. Du, J.N.H., and T.K. Oliver, Jr.: The baby in the delivery room. *J.A.M.A.,* 207:1502, 1969.

The following presentations are abstracts of papers presented at a recent meeting of the Detroit Surgical Association:

Limited surgical procedures for Dupuytren's contracture

By Alex P. Kelly, Jr., MD
John G. Elmquist, MD
Donald M. Ditmars, Jr., MD
Detroit

Our current surgical management of Dupuytren's Contracture in approximately 85% of the candidates for surgery seen in our clinic is as follows. This method has been employed almost exclusively in the past 10-11 years.

The emphasis is placed on:

1. Direct exposure of band.
2. Excision limited to involved fascial band only, with minimal extension to surrounding tissues.
3. Loose closure with minimal number of sutures.
4. Z-plasty.
5. Firm compression dressing utilizing steel wool sponge for 48 hours postoperatively.

Our classification is Grade I-IV as defined:

I. Skin dimple or nodule formation only.

II. Fascial band, palm and/or digits causing limitation motion—digits.

III. Fascial bands extending to digits causing limitation of motion.

IV. Grade III plus joint changes.

In over 200 operative cases our overall results are:

68%—Excellent
17%—Good
10%—Fair
5%—Poor

With Z-plasty plus subtotal palmar fasciectomy our results have been:

70%—Excellent
18%—Good
7%—Fair
5%—Poor

A simple and safe technique for interruption of the inferior vena cava

By Jason Bodzin, MD
Joseph S. Bassett, MD
Detroit

Interruption of the inferior vena cava has been shown to be an effective method of prevention of pulmonary embolism secondary to deep vein thrombophlebitis. In the past, interruption of the inferior vena cava by ligation, suture plication or partitioning with a teflon clip have been advocated and have been generally successful. However, these methods of caval interpution involved a major surgical procedure requiring general anesthesia, and may therefore be too great an insult to an already severely compromised patient. The Mobin-Uddin inferior vena cava umbrella filter is a safe and logical alternative to a more extensive procedure.

The apparatus involved in the implantation of the umbrella filter is described, and the method of insertion is outlined in great detail.

Implantation of the umbrella filter may have some advantages over the other traditional operations. Flow in the inferior vena cava it not acutely interrupted. The reduction in flow is gradual, and development of collaterals is stimulated. The operation is done in 30-40 minutes, under local anesthesia, and provides a minimum of discomfort to the patient.

The use of the Mobin-Uddin inferior vena cava umbrella filter is indicated for the prevention of recurrent pulmonary embolism secondary to deep vein thrombophlebitis.

Occult subacute thyroiditis - diagnostic challenge

By Joel I. Hamburger, MD
Southfield

The hallmark of subacute thyroiditis is a painful tender goiter.[1] Other clinical manifestations include low grade fever, malaise, and evidence of a mild hypermetabolic state. Laboratory studies characteristically reveal elevated serum thyroxine values, suppressed ^{131}I uptake, polymorphonuclear leukocytosis and elevated sedimentation rate.[2,3]

With this classical presentation diagnosis presents little difficulty. However, in the absence of the hallmark—a painful tender goiter—the diagnosis may either be overlooked, or alternative considerations given preference.

Of 4,223 consecutive patients evaluated at Northland Thyroid Laboratory in the two year period between 1969 and 1971, 29 had subacute thyroiditis; however, pain and tenderness of the thyroid was either minimal or absent in 13. Two of these patients exemplify the confusion which may result from the discovery of the characteristic disparity in serum thyroxine and ^{131}I uptake values, when subacute thyroiditis is not considered. In both instances it was assumed that the blocked ^{131}I uptake resulted from interfering medication. For one patient scanning of the thyroid was successful with ^{99m} Tc-pertechnetate, and led to a diagnosis of a nonexistent "nonfunctioning nodule." For the other patient a diagnosis of hyperthyroidism was made (on the basis of repeatedly elevated serum thyroxine values), and surgery or antithyroid drugs was advised because: "Obviously treatment with ^{131}I is out of the question in view of the poor uptake." These two patients will be presented, emphasizing the procedures of value to establish a diagnosis of occult subacute thyroiditis.

Case Report

Case 1. A 50-year-old man had been treated with antithyroid drugs for hyperthyroidism with storm in 1966. After one year the medication was discontinued and the patient remained in good health until November of 1970. At that time he complained of symptoms suggesting a return of his hyperthyroidism. A T_3 resin uptake was 33% (NR 25-35%), and a protein-bound iodine value was 14.1 g% (NR 4-8 g%). The patient was sent to a nearby hospital for ^{131}Iodine uptake, but in error was given Lugol's solution to prepare him for a brain scan. It was then assumed that if he were hyperthyroid, an elevated ^{131}I uptake should be demonstrated after a two week wait. However, this expectation was not realized for the 24-hour value proved to be 1.4%. A thyroid scan performed with ^{99m} Tc-pertechnetate revealed a defect in the upper pole of the left lobe of the thyroid which was interpreted as a "nonfunctioning nodule." Consideration of surgical intervention was suggested. At this point the patient was referred to the Northland Thyroid Laboratory for evaluation.

The history revealed an 18 pound weight loss in the previous 5 weeks, in spite of an increased appetite. There was no palpitation, no heat intolerance, and no looseness of the bowels. The patient had been taking COMBID® (a product which contains enough iodine to block the ^{131}I uptake), and reserpine 0.25 mg daily. The skin was normal in texture and cool. The reflexes were normal. The pulse was 96. The thyroid gland was normal in size and not tender. There were no nodules. The 24-hour ^{131}Iodine uptake was 2% (9 days after the prior value of 1.4%), and the serum thyroxine by competitive protein binding was

---

Doctor Hamburger is with the Northland Thyroid Laboratory, and is chairman, Department of Medicine, Highland Park General Hospital.

10.6 g% (NR 3.0-6.5 g%). The T_3 resin uptake was 41% (NR 25-35%).

The differential diagnosis included hyperthyroidism with the ^{131}Iodine uptake blocked by the combination of recent Lugol's solution and the iodine content of the COMBID®; and the alternate possibility, subacute thyroiditis. The white blood count was 11,800 with 72% polymorphonuclear leukocytes. The sedimentation rate was 55. These studies were considered consistent with subacute thyroiditis. The patient was asked to discontinue COMBID®, not to take any other medication until carefully checked to exclude iodine content, and to return for re-evaluation in one month. At the end of this interval a serum thyroxine was 8.2 g% and the T_3 resin uptake was 41%. The 24-hour ^{131}Iodine uptake was 3%, and a repeat value after TSH was 5%. No treatment other than continued observation was advised.

Two and one half months later a serum thyroxine value was 5.9 g%, the T_3 resin uptake was 32%, and the 24-hour ^{131}Iodine uptake was still only 3%.

Three months later the serum thyroxine was 5.0 g%, the T_3 resin uptake 27%, and the 24-hour ^{131}I uptake had now recovered to 19%. The thyroid scan revealed an asymmetrical gland with a larger right lobe (the usual anatomical asymmetry), but otherwise was entirely normal. The referring physician was advised that the prolonged duration of the inflammatory process may increase the likelihood of future hypothyroidism, therefore annual reassessment of thyroid function was encouraged.

Case 2. A 37-year-old man was seen on 5/28/71, having been previously evaluated elsewhere. There was a history of palmar sweating, hand tremor and minimal weight loss. On 4/15/71, a T_3 resin uptake value was 83 (NR 43-60). On 4/28/71, the ^{131}I uptake was 5% at six hours, and 1.5% at 24 hours. A serum thyroxine value was 11.2 g% (NR 4.5-8.5). Although the ^{131}I uptake value was in the hypothyroid range a diagnosis of hyperthyroidism was made on the basis of the history and the elevated blood studies. A repeat ^{131}I uptake was performed on 5/21/71, revealing a 6 hour value of 6.4% and a 24-hour value of 2%. An "unknown chemical block" was invoked to explain these results. Treatment with surgery or antithyroid drugs was advised. The patient was then referred to the Northland Thyroid Laboratory for further consultation. Examination of the skin and reflexes was normal. The pulse was 72. There were no eye signs of hyperthyroidism. The thyroid gland was neither enlarged nor tender. No history of significant medication ingestion could be obtained. Since the patient appeared clinically euthyroid the following diagnostic considerations were entertained: Subsiding subacute thyroiditis, thyrotoxicosis factitia, (the patient having discontinued the thyroid hormone in the interval between his previous studies and our examination), and mild hypothyroidism (assuming that the previous blood studies were erroneous). A repeat serum thyroxine value by the competitive protein binding method was 3.1 g% (NR 3.0-6.5 g%). A T_3 resin uptake was 25% (NR 25-35%). A baseline 24-hour ^{131}I uptake was 5%, and a repeat 24-hour value after TSH (5 units) was 9%. A thyroid scan revealed a somewhat patchy and irregular distribution of the tracer throughout a thyroid gland of normal size.

The low normal values for the serum thyroxine and T_3 resin uptake in conjunction with the subnormal response to TSH indicated that factitious self administration of thyroid hormone was not the cause of the poor ^{131}I uptake (higher blood values would have been obtained, and the ^{131}I uptake would have responded to TSH). Although a diagnosis of mild hypothyroidism could not be excluded, this required the conclusion that the previous serum thyroxine and T_3 resin uptake values were both grossly erroneous. It seemed more reasonable to conclude that this patient had subsiding thyroiditis, with falling serum thyroxine values as the ability of the thyroid gland to take up iodine was beginning to recover. A repeat evaluation two months later revealed normal values for both the serum thyroxine and ^{131}I uptake.

Discussion

The chief stumbling block to the diagnosis of occult subacute thyroiditis is failure to consider the possibility in the absence of a painful tender goiter.[4] In this regard there is a striking parallel with occult or masked hyperthyroidism, and probably incomplete forms of other more or less common diseases. The key to avoiding the error of overlooking subacute thyroiditis is to consider this diagnosis in every patient for whom one discovers the laboratory disparity of elevated serum thyroxine values and suppressed ^{131}Iodine uptake.

If the competitive protein binding method of determining the serum thyroxine concentration were universally employed, interfering iodine containing medication would be easily differentiated from thyrotoxicosis factitia. In the former the serum thyroxine would not be elevated as would be expected in the latter. It should be mentioned that if the thyroid hormone taken happened to be liothyronine (CYTOMEL®) then one might have low values for both the serum thyroxine and the ^{131}I uptake, yet clinical hyperthyroidism. The TSH test is of further value in this diagnostic problem. A response to TSH suggests that the suppressed uptake was the result of thyroid hormone, whereas a failure of response is compatible with subacute thyroiditis or iodine contamination. To make this differential one can refer to the serum thyroxine value by competitive protein binding. The serum thyroxine value will be normal with iodine ingestion and usually elevated with subacute thyroiditis. These findings may be modified depending upon the stage of subacute thyroiditis during which the patient is first seen. If the disease is already subsiding then the T_4 value may be only slightly elevated, normal or even low. At this point there may be either some recovery in uptake, or persistently low and unstimulatable values (as in our second patient).[5] Therefore patience and repeat testing is necessary if the diagnosis is to be unequivocally established. In this regard the value of a polymorphonuclear leukocytosis and elevated sedimentation rate should be emphasized. However, these indices also may be normal or nearly normal if the patient is not seen until the process is subsiding, or if the disease is mild.

Although subacute thyroiditis usually presents with diffuse involvement of the thyroid, initially there may be involvement of only a portion of the gland. This portion may become nodular and will appear hypofunctional on scanning.[6,7] This may raise the consideration of a thyroid neoplasm. Once again, observation with repeat testing will clarify matters.

The frequency with which subacute thyroiditis may be encountered in an incomplete form has been emphasized.[8,9] It seems likely that subacute thyroiditis is much more common than is generally appreciated.[9] Of the 29 patients for whom we have made the diagnosis in the past two years, 13 had very minimal or no evidence of inflammatory disease at the time they were first seen. The correct diagnosis was suggested by laboratory data and confirmed by follow-up studies. In view of the lack of clinical symptoms it seems likely that the diagnosis may be overlooked for a significant number of patients with occult subacute thyroiditis, or perhaps even worse, incorrect diagnoses may be entertained,[10] as happened with the two patients herein presented.

Bibliography

1. Crile, G., Jr., and Rumsey, E.W.: Subacute thyroiditis. *JAMA.* 142: 458-462, 1950.
2. Thomas, W.C., Jr., Anderson, R.M., Jurkiewicz, M.J., Araujo, J.D., and Blizzard, R.M.: Clinical studies in thyroiditis. *Ann. Int. Med.* 63: 808-818, 1965.
3. Volpe, R., Johnston, M.W., and Huber, N.: Thyroid function in subacute thyroiditis. *J. Clin. Endocrinol.* 18: 65-78, 1958.
4. Vanderlinde, R.J., and Milne, J.: Subacute thyroiditis with special emphasis on the problem of early recognition. *JAMA.* 173: 1799-1802, 1960.
5. Czerniak, P., and Steinberg, A.H.: The chronology of events in the development of subacute thyroiditis, studied by radioactive iodine. *J. Clin. Endocrinol.* 17: 1448-1453, 1957.
6. DeWind, L.T.: Reversible manifestation of thyroiditis. *JAMA.* 172: 158-159, 1960.
7. Hamburger, J.I.: Subacute thyroiditis—evolution depicted by serial ^{131}I scintigram. *J. Nuc. Med.* 6: 560-565, 1965.
8. McWhinney, I.R.: Incidence of de Quervain's thyroiditis: Ten cases from one general practice. *Brit. Med. J.* 1: 1225-1226, 1964.
9. Furszyfer, J., McConahey, W.M., Wahner, H.W., and Kurland, L.T.: Subacute (granulomatous) thyroiditis in Olmsted County, Minnesota. *Mayo Clin. Proc.* 45: 396-404, 1970.
10. McConahey, W.M.: Treatment of granulomatous (subacute) thyroiditis. *Modern Treatment.* 1: 168-175, 1964.

Doctors McDonald, Climie answer criticism of Halothane article

To the editor:

In a letter published in the November, 1971 issue of *Michigan Medicine* Seigne et al[1] criticized our recent article "Halothane, Methoxyflurane and Hepatic Necrosis."[2] It is unfortunate that we were not given an opportunity to respond to this criticism prior to publication of the letter as they have misinterpreted much of our discussion.

Our statement that "the incidence of fulminant hepatic failure following halothane anesthesia is low, ranging from one per 5,000 to one per 15,000 random halothane anesthesias with one per 10,000 being the most acceptable figure," is fully supportable by careful analysis of the literature. Table 4 of the National Halothane Study gives the incidence of massive hepatic necrosis following halothane as 1.02 per 10,000 administrations.[3] In addition, it is clear not only from the summary but also from the report of the pathology panel[4] and the clinical and pathologic study of these cases by Babior and Davidson,[5] that there were 19 necropsied post-anesthetic deaths in which there was intermediate to severe hepatic necrosis, the cause of which was attributed directly to the anesthetic agent. Of these 19 cases, 14 involved halothane, and since halothane was used in 254,896 cases, the incidence of hepatic necrosis directly attributable to halothane was one per 18,000 halothane administrations. We emphasize that only autopsied cases were examined. In spite of these figures, we reiterate that our article did not specify a casual relationship but was simply a statement of incidence of fulminant hepatic failure following halothane. Others have interpreted the National Halothane Study in a similar manner and some have implied a casual relationship.[6,7,8] Admittedly Slater et al[9] arrive at their figure of one case per 14,685 on the basis of only one death from halothane associated hepatitis manifested by massive hepatic necrosis. The incidence of clinical hepatic necrosis following halothane (lethal and non-lethal) in their study was one per 4,895 halothane anesthesias.

If more evidence for the incidence of halothane associated hepatitis is necessary, many other studies may be quoted:

1. Herber and Specht report an incidence of one case of hepatic necrosis in 800 halothane anesthesias. One fourth of their patients died giving a fatality rate for those with hepatic necrosis of one per 3,200 random halothane administrations.[10]
2. Keeri-Szanto and Lafleur report unexplained hepatic death following roughly 1 per 8,000 random halothane administrations.[11]
3. Gingrich and Virtue found one case of severe hepatic pathology in about 3,000 halothane anesthesias.[12]
4. DeBacker and Longnecker report one case of massive hepatic necrosis following 20,232 administrations of halothane.[13]

Seigne et al have suggested that we omitted vital information from the article by Trey et al.[14] We are in full agreement with the statement by both Seigne et al and Trey et al that the relative risks of an anesthetic agent cannot be determined from a study of a single fatal complication, but this was not our purpose. Trey et al also reported that in their series, 25% of the cases of fulminant hepatic failure followed halothane anesthesia by less than three weeks and that 77% of these cases had multiple exposures to halothane. These figures led them to conclude that "when the use of halothane is desired, multiple exposure should be avoided, if possible." In another study of 46 additional cases of halothane associated hepatic necrosis, Trey et al recommend that as a preventative measure the use of halothane should be limited to operations where it is so far superior to other anesthetics that it is worth the small but definite risk of producing hepatic failure.[15] With these conclusions we agree and so stated clearly in our article.

As to the criticism that our second patient did not have fever postoperatively, we would point out that she was discharged from the hospital two days following surgery and therefore her temperature was not monitored. The fact that she denied fever does not rule out the possibility that she may have been febrile in addition to complaining of loss of appetite, nausea, weakness and weight loss.

Seigne et al apparently agree with our opinion that halothane is not a direct hepatotoxin but rather acts via a hypersensitivity mechanism. In fact they quote Klatskin as giving the "classical description of true hepatotoxins," and it is this same Klatskin, along with Kimberg, who demonstrated so clearly the hypersensitivity mechanism of halothane hepatic toxicity in a study of a sensitized anesthetist.[16]

It is reassuring that Seigne et al accept the fact that there is, as they state it, "a slight though admitted risk of hepatic damage" from halothane. We have only stressed that this risk is markedly increased with multiple exposures. This is even accepted by Artusio, an author with whom Seigne et al state they agree.[17] Accepting only this fact it is not only logical but also good medical practice to investigate the possibility of prior exposure to halothane when choosing a subsequent anesthetic agent.

(Continued on Page 1163)

Campbell's Soups... wide variety...for limited appetites

Many people lose interest in food as they grow older. Some of them are fussy eaters—with only a few favorite foods. Others become indifferent to foods—because planning and preparing meals becomes a chore. Here Campbell's Soups can help—for these four very good reasons:

Appeal With a variety of tastes, textures, aromas, and colors, Campbell's Soups can add interest and appetite appeal. And they're easy to eat—ingredients are tender, bite-size. Many patients on special diets will find soups they can enjoy among the more than 50 different varieties available.

Campbell's
CONDENSED
SOUP

Nourishment Campbell's Soups contain selected meats and sea foods, best garden vegetables—carefully processed to help retain their natural flavors and nutritive values.

Convenience Within 4 minutes a bowl of delicious soup is heated and ready to eat.

Economy Campbell's Soups are inexpensive—an important consideration to those whose budgets are limited.

Recommend Campbell's Soups . . . and, of course, enjoy them yourself. Remember, *there's a soup for almost every patient and diet . . . and for every meal.*

When diarrhea wrings the wedding belle...

It's all very well to counsel patience in diarrhea patients. There are times when relief of symptoms can't come too soon.

X-ray studies[1] in 16 normal subjects showed just how promptly the active ingredient in Lomotil does its work.

Lomotil retarded gastrointestinal motility particularly during the first three hours after administration. It continued its moderating action on the bowel for at least three hours more.

Physicians prescribe Lomotil more often than any other drug when the urgency for the control of diarrhea is most distressing.

1. Demeulenaere, L.: Action du R 1132 sur le transit gastro-intestinal, Acta gastroent. Belg. 21:674-680 (Sept.-Oct.) 1958.

Lomotil®

TABLETS/LIQUID

Each tablet and each 5 cc. of liquid contain:
Diphenoxylate hydrochloride . . . 2.5 mg.
(Warning: may be habit-forming)
Atropine sulfate . . . . 0.025 mg.

Saves the Day

Warnings: Lomotil should be used with caution in patients taking barbiturates and, if not contraindicated, in patients with cirrhosis, advanced liver disease or impaired liver function.

Precautions: Lomotil is classified as a Schedule V substance by Federal Law with theoretically possible addictive potential at high dosage; this is not ordinarily a clinical problem. Use Lomotil with considerable caution in patients receiving addicting drugs. Recommended dosages

should not be exceeded, and medication should be kept out of reach of children. Signs of accidental overdosage may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia; continuous observation is necessary. The subtherapeutic amount of atropine sulfate is added to discourage deliberate overdosage.

Adverse Reactions: Side effects reported with Lomotil therapy include nausea, sedation, dizziness, vomiting, pruritus, restlessness, abdominal discomfort, headache, angioneurotic edema, giant urticaria, lethargy, anorexia, numbness of the extremities, atropine effects, swelling of the gums, euphoria, depression and malaise.

Overdosage: The medication should be kept out of reach of children since accidental overdosage may cause severe, even fatal, respiratory depression.

Dosage: The recommended average initial daily dosages, given in divided doses until diarrhea is controlled, are as follows:

Children:
3-6 mo.... ½ tsp.* t.i.d. (3 mg.)
6-12 mo... ½ tsp. q.i.d. (4 mg.)
1-2 yr..... ½ tsp. 5 times daily (5 mg.)
2-5 yr.....1 tsp. t.i.d. (6 mg.)
5-8 yr.....1 tsp. q.i.d. (8 mg.)
8-12 yr....1 tsp. 5 times daily (10 mg.)
Adults:....2 tsp. 5 times daily (20 mg.)
or 2 tablets q.i.d.

*Based on 4 cc. per teaspoonful.

Use of Lomotil is not recommended in infants less than 3 months of age.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

SEARLE
Manufactured by SEARLE & CO.
San Juan, Puerto Rico 00936

For more detailed medical information write.
G. D. Searle & Co., Medical Department,
P.O. Box 5110, Chicago, Illinois 60680
Research in the Service of Medicine

DARVON®
COMPOUND-65
65 mg. propoxyphene hydrochloride, 227 mg.
aspirin, 162 mg. phenacetin, and 32.4 mg. caffeine
Lilly
H06

Additional information available to the profession on request.
Eli Lilly and Company • Indianapolis, Indiana 46206

Lilly

101488

New Members

Members of the Michigan State Medical Society join in welcoming the following new members into a progressive state medical organization. MSMS is dedicated to promoting the science and art of medicine, the protection of the public health, and the betterment of the medical profession. Each new member is encouraged to join with other MSMS members at both the local and the state levels in achieving these goals.

J. Scott Allen, MD, 16820 Greenfield, Detroit 48235
Surindar S. Bedi, MD, Finch Clinic, Onaway 49765
Rafael C. Brillantes, MD, 1514 Fourth St., Jackson 49203
B. G. Buenaflore, MD, 10 Cairns, Tecumseh 48286
F. F. Buenaflore, MD, 10 Cairns, Tecumseh 49286
Mansuk Chae, MD, W. Outer Drive Hospital, Lincoln Park 48146
Jay L. Collins, MD, Henry Ford Hospital, Detroit 48202
Conrado C. Del-Rosario, MD, 22231 W. Outer Drive, Dearborn 48124
Elvira Espiritu, MD, 2200 E. Grand Blvd., Detroit 48238
Rogelio F. Espiritu, MD, 4059 W. Davison, Detroit 48238
Frederick V. Featherstone, MD, 400 North Ave., Battle Creek 49017
Burjor D. Ghandhi, MD, 19309 Greenfield, Detroit 48235
Frank J. Greene, MD, 2655 Golfview Dr. #202, Troy 48084
Roy A. Highsmith, MD, 113 W. Front St., Adrian 49221
Jane J. Jawahir, MD, 190 Robinwood, S.E., Grand Rapids 49506
Vivian P. Jawahir, MD, 3181 Prairie St., S.W., Grandville 49418
Stuart Katz, MD, 22341 W. Eight Mile Rd., Detroit 48219
James B. Keplinger, MD, 1414 W. Fair Ave., Marquette 49855
Soon Kuyn Kim, MD, P. O. Box 172, Eloise 48132
Mary J. Kokosky, MD, Henry Ford Hospital, Detroit 48202
Hi Sung Lee, MD, Wayne County General Hosp., Eloise 48132
John S. Moran, MD, 20101 James Couzens Hwy., Detroit 48235
K. C. R. Nair, MD, 41001 W. Seven Mile Rd., Northville 48167
Jorge V. Ottaviano, MD, 41001 W. Seven Mile Rd., Northville 48167
John P. Papp, MD, 515 Lakeside Dr., S.E., Grand Rapids 49506
Stephen N. Preston, MD, Parke, Davis & Co., Ann Arbor 48105
Renato G. Ramos, MD, 3535 W. 13 Mile Rd. #205, Royal Oak 48072
Robert E. Ribbe, MD, 124 Fulton St., E., Grand Rapids 49502
Col. Robert Rouse, MC, USAF Hospital K I, Sawyer AFB 49843
Thomas M. Schenk, MD, 15101 Southfield, Allen Park 48101
Lawrence C. Sweet, MD, Henry Ford Hosp., Detroit 48202
Akemi Takekoshi, MD, 22900 E. Remeck, Mt. Clemens 48043
Stanley Wicha, MD, 1232 Geneva, Dearborn 48124
Eugene R. Williams, MD, 6246 Chase Rd., Dearborn 48126
Richard F. Willis, MD, 312 E. Chisholm, Alpena 49707
Kian H. Wong, MD, 10151 Michigan, Dearborn 48126

Mead Johnson—pharmaceuticals created for your specialized clinical needs

One good K-Lyte® deserves another...

Each effervescent tablet in solution supplies 25 mEq. potassium as bicarbonate and citrate

Introducing

K-LYTE®/CL

Each dose in solution supplies 25 mEq. potassium chloride

potassium supplement with chloride

The good-tasting way to treat hypokalemias induced by thiazide diuretics and other drugs...

Here, at last, is a potassium chloride supplement that just doesn't taste like one! The mixed fruit flavor of new K-Lyte/Cl is truly refreshing. Now, K-Lyte/Cl offers your patients all of the therapeutic advantages you expect from a potassium chloride supplement. And you can be sure that your patients will take the K-Lyte/Cl you prescribe—all in good taste.

Now you have a choice...

When extra chloride is not desired, original effervescent K-Lyte is unsurpassed in flavor, effective and safe in short- or long-term potassium supplementation. There is little chance of taste fatigue from K-Lyte with two delicious, effervescent flavors to alternate...fresh-tasting orange and sparkling lime.

K-Lyte® Each effervescent tablet in solution supplies 25 mEq. potassium as bicarbonate and citrate

K-Lyte®/Cl Each dose of powder in solution supplies 25 mEq. potassium chloride

Each tablet or dose must be completely dissolved before taking.
Indications: K-Lyte and K-Lyte/Cl are oral potassium supplements for therapy or prophylaxis of potassium deficiency. Particularly useful when thiazide diuretics or corticosteroids cause excessive excretory potassium losses. **Contraindications:** Impaired renal function with oliguria or azotemia; Addison's disease; hyperkalemia from any cause. **Warnings and Precautions:** Since the amount of potassium deficiency may be difficult to determine accurately, supplements should be administered with caution, and dosages adjusted to the requirements of the individual patient. Potassium intoxication rarely occurs in patients with normal kidney function. Symptoms of potassium intoxication are variable. They include listlessness, mental confusion, and tingling of the extremities. Frequent checks of the clinical status of the patient, ECG, and serum potassium level are desirable. In established hypokalemia, attention should also be directed toward other potential electrolyte disturbances. Potassium supplements should be given cautiously to digitalized patients. To minimize the possibility of gastrointestinal irritation associated with the oral ingestion of concentrated potassium salt preparations, patients should be carefully directed to dissolve each dose completely in the stated amount of water. K-Lyte/Cl contains 4.9 grams (20 calories) of sucrose per dose which should be considered for patients with restriction of caloric intake. **Adverse Reactions:** Nausea, vomiting, diarrhea, and abdominal discomfort may occur with the use of potassium salts. **Dosage and Administration:** Adults: 1 tablet or dose *completely dissolved,* 2 to 4 times daily, depending upon the requirements of the patient: K-Lyte: 1 tablet (25 mEq. potassium) in *3 to 4 ounces of cold or ice water;* K-Lyte/Cl: 1 dose (25 mEq. potassium chloride) in *6 ounces of cold or ice water.* The normal adult daily requirement is approximately 50 mEq. of elemental potassium. NOTE: *It is suggested that these products be taken with meals and sipped slowly over a 5-10 minute period.* **How Supplied:** K-Lyte: Effervescent tablets—boxes of 30 and 250 (orange or lime flavors). K-Lyte/Cl: Powder, cans of 30 measured doses with scoop (fruit-punch flavor). ℞

© 1971 MEAD JOHNSON & COMPANY • EVANSVILLE, INDIANA 47721 U.S.A. 181471

Mead Johnson
LABORATORIES

MSMS news

Michigan Mediscene

Dec. 5—Michigan Academy of Family Physicians, board meeting, 2 p.m., MSMS headquarters, contact: Louis R. Zako, MD, president, 7720 Allen Road, Allen Park 48101

Dec. 8—MSMS Council, MSMS headquarters, East Lansing, 9:30 a.m., contact: Warren F. Tryloff, MSMS director, MSMS headquarters

Dec. 8—11th Annual Thyroid Workshop, sponsored by Thyroid Service of Wayne State University School of Medicine, Wayne County Medical Society Auditorium, Detroit; contact: Ali Abbasi, MD, Publicity Committee, Wayne State University School of Medicine, 1400 Chrysler Freeway, Detroit 48207

Dec. 9—Gynecological-Surgical Clinic for Michigan MDs and DOs, afternoon and evening, E. W. Sparrow Hospital, Lansing, contact: R. W. Pomeroy. MD, Director of Medical Education, Sparrow Hospital, Lansing

Jan. 7, 8 and 9—Michigan Allergy Society Family Winter Weekend, Shanty Creek Lodge, contact: Rudolph E. Wilhelm, MD, Michigan Allergy Society, 751 S. Military Road, Dearborn 48124

Jan. 19—Conference on Changing Patterns of Care for Children and Youth, Michigan Nurses Association, 9:30 a.m.—3:30 p.m.—MNA headquarters, contact: Mrs. Susan Gerds, conference secretary, MNA, 120 Spartan Ave., East Lansing 48823

Jan. 20—MSMS Professional and Lay Education Workshop, 10 a.m., MSMS headquarters, contact: Miss Helen Schulte, MSMS headquarters

Jan. 25—Woman's Auxiliary to MSMS, Executive Committee meeting, MSMS headquarters, (for state officers, committee chairmen, district directors, county presidents) contact: Mrs. Charles Schoff

Jan. 29-30—Educational seminar and board meeting, Michigan State Medical Assistants Society, Holiday Inn, Battle Creek, contact: Patricia Voke, 196 S. Woodrow Ave., Battle Creek 49015

March 26—Board meeting, Michigan State Medical Assistants Society, noon, MSMS headquarters, contact: Mrs. Betty L. Boers, president, MSMAS, 1116 Sheridan, Kalamazoo 49001

March 29—Muskegon Trauma Day, Holiday Inn, Muskegon, contact: Guida Anessa, MD, 205 Medical Arts Center, Muskegon

March 29-30—Annual Michigan Conference on Maternal and Perinatal Health, Olds Plaza Hotel, Lansing; contact: Joseph L. Sheets, MD, 2909 E. Grand River, Lansing; or Helen Schulte, MSMS headquarters

April 3—Annual Beaumont Lecture, Wayne County Medical Society, Detroit; contact: William Blodgett, MD, Wayne County Medical Society, 1010 Antietam, Detroit 48207

April 13-15—Michigan Heart Association Heart Days, Cobo Hall, Detroit, contact: Harold Arnow, publicity director, MHA, 13100 Puritan, Detroit 48227

April 19—Woman's Auxiliary to MSMS, Legislative Day, Olds Plaza, Lansing, contact: Mrs. R. J. Westerhoff, WAMSMS Legislative Chairman, 2458 Maplewood, SE, Grand Rapids 49506

April 19-20—Woman's Auxiliary to MSMS, Spring Conference, Hospitality Inn, East Lansing, contact: Mrs. Charles Schoff

April 27-30—Annual Convention, Michigan State Medical Assistants Society, Holiday Inn, Crosstown Parkway, Kalamazoo, contact: Mrs. Betty Boers, 1116 Sheridan, Kalamazoo 49001

April 30-May 5—American Nurses Association Biennial Convention, Cobo Hall, Detroit, contact: Miss Virginia Stone, executive director, Detroit District, Michigan Nurses Association, 316 Fisher Building, Detroit 48202

May 18-19—Annual Gull Lake meeting, MSMS Committee on Maternal and Perinatal Health, Kellogg Biological Station, Gull Lake, contact: Helen Schulte, MSMS headquarters

May 22-23—Michigan Chapter Meeting and Scientific Session of the American College of Emergency Physicians, Shanty Creek, Bellaire, contact: Gaius Clark, MD, 865 Pebblebrook Lane, East Lansing 48823

June 2-3—Gaylord Trauma Day, Hidden Valley Otsego Ski Club, Gaylord, contact: Benjamin Henig, MD, Keyport Clinic, 308 Michigan Ave., Grayling 49738

June 5, 6, 7—Initial Management of the Acutely Ill and Injured Patient, Ann Arbor, contact: Charles F. Frey, MD, Department of Surgery, University of Michigan Medical Center, Ann Arbor 48104

(Continued on Page 1140)

Schering

for grown-up colds

...that call for strong medicine
...the kinds that potent DRIXORAL is reserved for.
(Noses under 12 years of age
aren't eligible.) For the adult case of
nasal/sinus congestion:
a tablet for the day keeps congestion away,
a tablet at night, sleeper's delight.

Sustained-Action Tablets

b.i.d. Drixoral®

brand of dexbrompheniramine maleate 6 mg. and d-isoephedrine sulfate 120 mg.

The round-the-clock oral decongestant

ical Considerations: Indications: DRIXORAL is indicated for round-the-k relief of symptoms of upper respiratory mucosal congestion in seasonal perennial nasal allergies, acute rhinitis and rhinosinusitis, and eustachian blockage.

traindications: DRIXORAL should not be given to children under 12 years ge. DRIXORAL should not be administered to pregnant women or nursing ers until the safety of this preparation for use during gestation and lacto- is established. The preparation is contraindicated also in patients with re hypertension and coronary artery disease. **Warnings:** As in the case of r preparations containing central nervous system acting drugs, patients iving DRIXORAL should be cautioned about possible additive effects with hol and other central nervous system depressants (hypnotics, sedatives, quilizers). For the same reason they should be cautioned against hazardous pations requiring complete mental alertness such as operating machinery or driving a motor vehicle. **Precautions:** Isoephedrine-containing preparations should be used with caution in the presence of: hypertension; coronary artery disease; any other cardiovascular disease; glaucoma; prostatic hypertrophy; hyperthyroidism; diabetes. **Adverse Reactions:** The physician should be alert to the possibility of all possible adverse reactions which have been observed with sympathomimetic and antihistaminic drugs. These include: drowsiness; confusion; restlessness; nausea; vomiting; drug rash; vertigo; palpitation; anorexia; dizziness; dysuria due to vesicle sphincter spasm; headache; insomnia; anxiety; tension; weakness; tachycardia; angina; sweating; blood pressure elevation; mydriasis; gastric distress; abdominal cramps; central nervous system stimulation; circulatory collapse. **For more complete details, consult package insert or Schering literature available from your Schering Representative or Medical Services Department, Schering Corporation, Union, New Jersey 07083.**

SCH-2654

When irritable colon feels like this

...in the presence of spasm or hypermotility, gas distension and discomfort, **KINESED®** provides more complete relief:

- ☐ **belladonna alkaloids—for the hyperactive bowel**
- ☐ **simethicone—for accompanying distension and pain due to gas**
- ☐ **phenobarbital—for associated anxiety and tension**

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.
Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.
Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.
Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.
Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.

STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of ATLAS CHEMICAL INDUSTRIES, INC.

(from the Greek **kinetikos**,
to move,
and the Latin **sedatus**,
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

Spring peeper (tree frog, *Hyla crucifer*): this small amphibian can expand its throat membrane with air until it is twice the size of its head.

A new technique in the diagnosis of gonorrhea, as outlined by the MDPH, was explained in a four-page insert in your November *Michigan Medicine.*

Did you see it?

The insert may be easily removed from the journal for handy reference in your files.

Michigan doctors' fees to be examined by two MSMS surveys

A great deal of attention is being directed at the escalation of physicians' fees. In an effort to measure the real increase in fees, the Bureau of Economic Information has conducted an investigative research project. The project, in the form of a survey, revealed what fees are being charged for the procedures across the state.

The survey was designed to explore regional differences, if any. The survey results are grouped according to Component Medical Society boundaries. Also, state and regional averages were compiled.

The real importance of the survey will be realized when a follow-up survey is conducted in July, 1972. Fee patterns and overall trends will be exhibited by the findings of that survey.

Over 3,000 surveys were returned, and in connection with such a fine effort, the results of our initial fee survey will be shared with the boards of county medical societies, medical specialty societies, and other appropriate groups.

More detailed information may be obtained from John H. Anthony, Chief, MSMS Bureau of Economic Information.

National conference praises *Michigan Medicine*

By Judy Marr, Managing Editor

Michigan Medicine was complimented several times at the 1971 Biennial Journal Conference recently in New Orleans. Sponsor was the State Medical Journal Advertising Bureau.

MM was praised for its use of screens and artwork on the cover and inside pages, and for the use of the breaking news pages in the back of the journal as a good strong way to end the magazine.

Ralph T. Bell, PhD, chairman, Department of Journalism, Loyola University of New Orleans, paid the compliments as leader of a seminar entitled "How Does My Journal Stack Up."

He singled out *Michigan Medicine* for its emphasis on local medical problems and he quoted a *Michigan Medicine* article on the results of a survey of physicians on their use of the state medical society journal.

Creativity in cover designs, "clear, well-organized contents page," effective use of type, "generally strong and contemporary type faces," and opinion pages which "drew interest" were also commended.

Michigan Medicine was also the recipient of a "rose" from the SMJAB for perfect handling of advertising according to the advertisers' instructions, during 1971.

MSMS discussing ways to use television

MSMS was represented again when interested parties from health and educational agencies and organizations met recently to consider possible ways to utilize television to increase efforts in health education.

There was general agreement that programs geared for pre-school children and aired during the day might be most workable.

Financing was identified as perhaps the major question to resolve, because costs were estimated by the TV station officials to range from $600 to $1,000 a minute for production. Possible grants from government or foundations will be explored.

Where do Michigan physicians come from?

MSMS survey has the answers

Recent newspaper articles have reported the exodus from Michigan of medical school graduates. Since many doctors remain and practice in the community where they interned or had their residencies, the medical society is concerned about this exodus.

In order to understand the situation more fully, the MSMS Bureau of Economic Information undertook the task of finding out where Michigan's new licensees in medicine came from during 1969-71. With the help of John M. Wellman, MD, executive secretary, Department of Licensing and Regulation, Board of Registration in Medicine, the following tables were completed.

U. S. medical schools contributing 10 or more graduates during 1969-1971 to Michigan include the following:

Columbia University	10
Howard University	10
Loyola University	14
Marquette University	22
Northwestern University	24
Ohio State University	14
St. Louis University	14
Temple University	11
University of Illinois	24
University of Michigan	307
University of Minnesota	12
University of Wisconsin	15
George Washington University	10
Wayne State University	214

Foreign medical schools contributing five or more graduates during 1969-1971 to the ranks of Michigan physicians include:

Cairo University	5
Havana University	17
Istanbul University	12
McGill University	7
National University of Colombia	5
Teheran University	14
University of Ankara	5
University of Buenos Aires	9
University of Ottawa, Canada	6
University of Santo Tomas	13
University of Western Ontario	8

Between July 1, 1969 and July 1, 1971, there were 1,286 MDs who received their licenses to practice in Michigan. The breakdown is as follows:

School	Graduates	Percent
University of Michigan	307	23.9%
Wayne State University	214	16.6%
Other U.S. Medical Schools	499	38.8%
Foreign Medical Schools	266	20.7%
Total	1,286	100.0%

Internship Choices of 1971
Michigan Medical School Graduates

	Remaining in Michigan	Leaving Michigan	Total
University of Michigan	83 (41.1%)	119 (58.9%)	202
Wayne State University	60 (42.6%)	81 (57.4%)	141

Note:

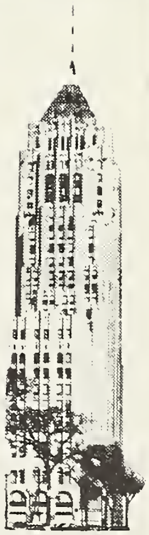
44 University of Michigan graduates are going to California for their internships.

25 Wayne State University graduates are going to California for their internships.

PERFECT MAKES PRACTICE.

And "perfect" is what the Fisher Building offers a professional practice: Unmatched office facilities; indoor parking contiguous to your office; a location that's easy for you and your patients to reach from the entire metropolitan area. You're near the many specialists in the profession, as well as labs and hospitals, making internal referrals most practical for both patient and physician. Near, of course, to shops and restaurants, to a bookstore and banks and a post office, and the magnificent Fisher stage. It's an atmosphere to accomplish things in. Call us now for diagnosis and consultation on your office needs. As our patient you will find your office problems cured!

THE FISHER BUILDING
Across from General Motors Building
Detroit 48202 • Phone 874-4444

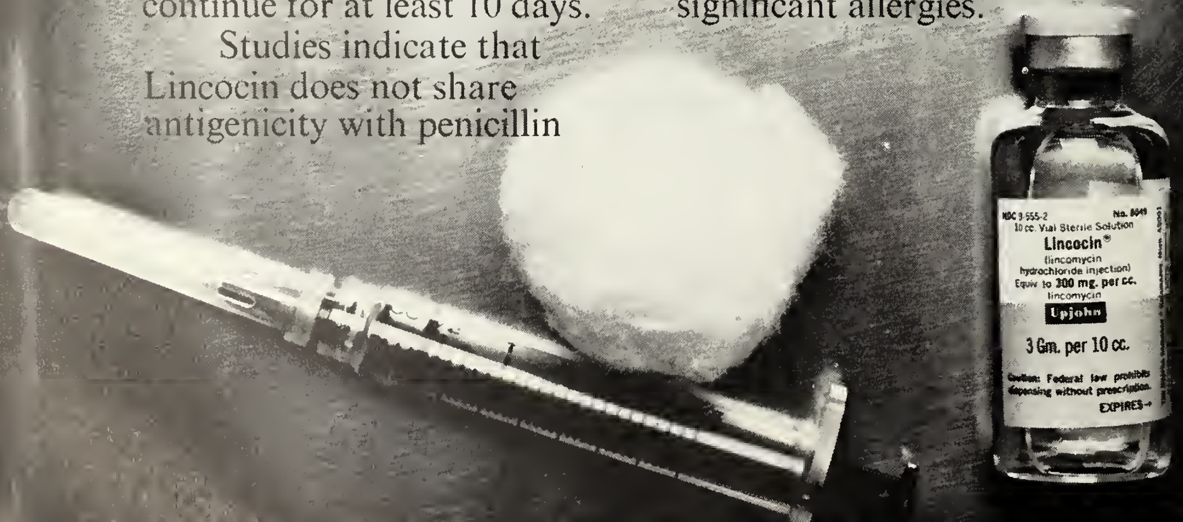


Hypersensitivity to penicillin is a good reason to consider Lincocin®

(lincomycin hydrochloride)

Lincocin (lincomycin hydrochloride, Upjohn) has produced a high percentage of satisfactory responses in patients with mild, moderate and severe infections due to susceptible streptococci, pneumococci and staphylococci (including many penicillinase-producing strains). With β-hemolytic streptococcal infections, treatment should continue for at least 10 days.

Studies indicate that Lincocin does not share antigenicity with penicillin compounds. However, hypersensitivity reactions such as angioneurotic edema, serum sickness and anaphylaxis have been reported, some of these in patients known to be sensitive to penicillin. As with any antibiotic, Lincocin (lincomycin hydrochloride, Upjohn) should be used cautiously in patients with histories of asthma or other significant allergies.


NDC 9-555-2
10 cc. Vial Sterile Solution
Lincocin®
(lincomycin
hydrochloride injection)
Equiv to 300 mg. per cc.
lincomycin
Upjohn
3 Gm. per 10 cc.
Caution: Federal law prohibits
dispensing without prescription.
EXPIRES→

So is penicillin-resistant staph.

Lincocin (lincomycin hydrochloride, Upjohn) has been demonstrated to be effective in susceptible penicillinase-producing staphylococcal infections resistant to penicillin (including ampicillin). However, resistant staphylococcal strains have been recovered; resistance appears to occur in a slow stepwise manner. As with all antibiotics, susceptibility studies should be performed.

Intramuscular and intravenous injections of Lincocin (lincomycin hydrochloride, Upjohn) are generally well tolerated. Instances of hypotension following parenteral administration have been reported, particularly after too rapid intravenous administration.

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.

NDC 9-555-2
10 cc. Vial Sterile Solution
Lincocin®
(lincomycin hydrochloride injection)
Equiv. to 300 mg. per cc. lincomycin
Upjohn
3 Gm. per 10 cc.
Caution: Federal law prohibits dispensing without prescription.
EXPIRES→

© 1971 The Upjohn Company

● Sterile Solution (300 mg. per ml.) ●

Lincocin®

(lincomycin hydrochloride, Upjohn) for respiratory tract, skin, soft-tissue, and bone infections due to susceptible streptococci, pneumococci, and staphylococci

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg. Pediatric Capsule	250 mg.
500 mg. Capsule	500 mg.
*Sterile Solution per 1 ml.	300 mg.
Syrup per 5 ml.	250 mg.

*Contains also: Benzyl Alcohol 9 mg.; and, Water for Injection—q.s.

An antibiotic chemically distinct from others available, indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: History of prior hypersensitivity to Lincocin (lincomycin hydrochloride). Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: Cases of severe and persistent diarrhea have been reported and at times drug discontinuance has been necessary. This diarrhea has been occasionally associated with blood and mucus and at times has resulted in acute colitis. This reaction usually has been associated with oral therapy, but occasionally has been reported following parenteral therapy. Although cross sensitivity to other antibiotics has not been demonstrated, make careful inquiry concerning previous allergies or sensitivities to drugs. Safety for use in pregnancy has not been established and Lincocin is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β-hemolytic streptococci infection for ten days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihistamines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid I.V. administration. Rare instances of cardiopulmonary arrest have been reported after too rapid I.V. administration. If 4.0 grams or more administered I.V., dilute in 500 ml. of fluid and administer no faster than 100 ml. per hour. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin. Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml. of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: *250 mg. and 500 mg.* Capsules—bottles of 24 and 100.

Sterile Solution, 300 mg. per ml.—2 and 10 ml. vials and 2 ml. syringe.

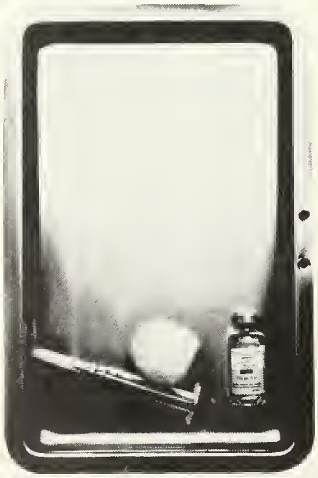
Syrup, 250 mg. per 5 ml.—60 ml. and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

JA71-1203 MED B-5-SR (KZL-6)

The Upjohn Company
Kalamazoo
Michigan 49001

Upjohn



Family practice,

medicine's newest specialty

By George A. Dean, MD
Southfield

In 1969, the American Board of Family Practice was established by the official action of the American Medical Association, the Advisory Board of Medical Specialists, the American Association of Medical Colleges, and the American Academy of Family Physicians. Family Practice was recognized as the 20th specialty in American medicine. Since that time, over 4,000 physicians have taken the qualifying examinations, and over 80% have passed and are now board-certified family practitioners. New training programs are proliferating in medical schools and community hospitals all over the country. A substantial percentage of medical students who are displaying a regard for the present inequities in our health care delivery system are being attracted to family practice as an answer to these disparities.

What exactly is this new specialty? What stimulated its formation? What is its present status, and what are its projections for the future? The purpose of this article is to answer these questions.

What Is Family Practice?

Let us start with a definition. Family practice is that specialty of medicine that provides continuous and comprehensive care of the patient within the family unit, caring for the majority of his needs, using a multidisciplinary approach, referring the patient to the necessary health resource or medical specialist when appropriate, but still preserving and perpetuating the continuity of care.

The composite body of knowledge utilized by the family physician in his regular activities is significantly different from that utilized by other specialists. The function of the family physician is significantly different from that of other specialists.

The family physician approaches the practice of medicine from a holistic point of view. This is in contradistinction to the narrow spectrum with which most medical specialists approach the practice of medicine. The family physician practices both scientific and humanistic medicine. He is the primary personal physician of the patient. He accepts responsibility for the total health care needs of his patient, within the context of his family, his environment, and his community. Comprehensive care includes preventative, diagnostic, therapeutic, rehabilitative, and coordinated health maintenance services.

He utilizes the essentials and substance of in-

Doctor Dean is a clinical instructor, Department of Community and Family Medicine, Wayne State University. He is also a diplomate of The American Board of Family Practice.

ternal medicine, pediatrics, psychiatry and community medicine—the four pillars on which family medicine is based. He makes use of the knowledge and techniques of surgery, obstetrics and gynecology. The social and behavioral sciences allow him to recognize the interrelationship of cultural, social, psychological and environmental factors which effect the physiologic and biochemical processes of the body.

Family medicine is flexible in that the physician may emphasize that discipline of medicine which interests him within his training and practice. He may stress surgical and obstetrical procedures, depending upon his competency or training. The core of his practice will depend on the following factors:

(1) His training
(2) His capabilities
(3) The location of his practice
(4) His interests

But in every instance, he will provide continuous and comprehensive care.

How does the family physician differ from the general practitioner? This is a question which frequently is asked. The terms "family physician" and "general practitioner" have often been used interchangeably. However, there are conceptual differences which should be understood in order to avoid semantic problems.

A family physician provides medical care usually in more than one discipline of medicine. He provides continuous and comprehensive care for the patient and assumes the responsibility for his total health care needs. A general practitioner provides medical care involving two or more specialty disciplines of medicine, but does not necessarily assume comprehensive or continuous care for his patient. Most general practitioners function as family physicians, but many others do not, e.g.

(1) A general practitioner working as a part of an emergency room team
(2) A general practitioner working in an industrial clinic
(3) A general practitioner staffing a university health center.

Whether he functions as a family physician or a general practitioner depends on whether he assumes responsibility for the comprehensive, continuous health care of his patient, within the context of their family group.

What Stimulated the Need For Family Practice?

Increasing needs and demands for medical care in today's changing society as evidenced by a number of recent studies by the public, departments of government, and the medical profession have resulted in an ever-widening gap between the demand for and the availability of medical care services. Public demand for a single competent physician for the entire family group grows as the availability of such physicians continues to diminish.

To meet the need of a physician who assumes the continuing responsibility for the health of the patient as an individual, and for the family as a basic social unit of society, the new specialty of family practice has evolved.

In 1931, there were 112,000 physicians who classified themselves as general practitioners, out of a total medical force of 200,000 physicians. Nearly 55% of the total physicians in the United States of America, in 1931, were general practitioners. In 1971, there are 60,000 physicians who designate themselves as general practitioners, out of a total health force of 335,000 medical doctors in the United States of America. This represents only 18% of the physicians practicing medicine today. This would indicate that there has been a precipitous drop in the number of family physicians.

This decline is directly related to the creation of a vast new methodology and scientific knowledge revolving around medical specialties. During the past decades, there was a great need for the training of these new specialists.

The interest of the medical student was directed to these specialties as the educational facilities oriented them to these academic endeavors. Students had little or no exposure to family physicians or family practice during their entire medical education. Medical education was geared to the episodic care of patients in acute medical crises in university hospitals.

In 1960, the Kerr-White study revealed that in a given month, out of one thousand people in our population, 250 would seek medical attention. Of these, 241 patients would be treated in the physician's office. Eight would be hospitalized in a community hospital, and one would be hospitalized in a university hospital.

The majority of the medical student's experience with patients was with only that one patient seen at the university hospital. The doctor's office, where the majority of American medicine is practiced, was neglected as a teaching experience. The vast majority of medical school graduates gravitated to specialty training. Now we have an over-abundance of these specialists practicing in their narrow spectrum, and we have a shortage of primary, or family physicians. This inequity is most apparent in the inner cities of our large

(Continued on Page 1148)

With EVAC-U-GEN your patients with functional constipation can evacuate gently. This is highly desirable for those sensitive to harsh laxatives . . . particularly children, pregnant women, and geriatric patients

EVAC-U-GEN® *CHEWABLE*
VERY PALATABLE
ECONOMICAL

A highly-flavored and palatable tablet of yellow phenolphthalein, bismuth subcarbonate, bismuth subgallate in special base. Chewable. Bottles of 35 and 100. Adult Dose: Chew 1 or 2 tablets night or morning. Children (up to age 10): 1/2 tablet. A citrus drink taken with tablet will stimulate action.

PRECAUTION: Do not use when symptoms of appendicitis are present and discontinue use if skin rash appears. Dependence on laxatives can result from continued use.

WALKER, CORP & CO., INC. Syracuse, New York 13201

urban areas, and the rural areas of pastoral America.

Does America want and need family physicians? I feel that the American public does want and need a special physician to provide comprehensive and personal care. Because of the complexity of modern medicine and the health care delivery system, each patient needs a highly trained, concerned physician to facilitate his access into the health care delivery system. This premise is based on the following items:

(1) The findings of the task force of the Comprehensive Personal Health Service of the National Commission on Community Health.

(2) Deliberations and conclusions of the Citizens Commission on Graduate Medical Education.

(3) The A.M.A. Placement Service observed that the majority of requisitions from communities are for family physicians, and most of them go wanting.

(4) The United States Congress overwhelmingly approved a bill to allocate $225,000,000 for the establishment of Departments of Family Medicine and Residency Programs throughout the country.

(5) The indirect evidence that many specialists are called upon by their patients to practice family medicine, even though their education has not provided training to allow them to do so.

What Is the Present Status Of Family Practice?

Since the recognition of family practice as a specialty in 1969, there has been a resurgence of interest and activity in both undergraduate and graduate training programs for the family physician. New undergraduate programs in family practice are now in various stages of development in over 50% of United States medical schools. For example, at Wayne University, there is a Department of Community and Family Medicine. Junior medical students are serving five and one-half week preceptorships in family physicians' offices in Wayne and Oakland Counties. Didactic lectures concerning family practice and allied subjects are being delivered to these students as part of their rotation in the Department of Community and Family Medicine. Junior medical students are serving clinical clerkships at the Jeffries Housing Project in Detroit. This clinic is staffed by volunteers from the Wayne County Academy of Family Practice who supervise the medical students in the delivery of family practice in a clinical setting.

A senior preceptorship program has been established with the three medical schools in the State of Michigan. Two hundred family physicians have offered their services to these medical students who wish to spend a four-to-twelve week session observing the clinical application of family medicine in actual practice.

Recently, a workshop for teaching family medicine was held at Lansing, Michigan. Over 50 family physicians from all over the state availed themselves of this intensive workshop to improve their teaching techniques. There are 74 residency programs in community and university hospitals all over the United States. Family physicians are receiving academic appointments at medical schools in growing numbers. A new organization of teachers of family practice has been established. The Michigan State Legislature has recently passed a bill encouraging all medical schools in the State of Michigan to establish departments of family medicine.

A prevalent happening in many medical schools, particularly in the last year, is that one-quarter to one-third of each class is seriously considering family practice as a career. In a recent questionnaire at the University of California School of Medicine, almost one-half of the respondents listed family practice as the leading choice for their future field.

What Is the Future of Family Practice?

The primary physician should serve as a personal physician, responsible for continuing and comprehensive care. Today the role may be played by a family physician, a general practitioner, an internist, a pediatrician, an obstetrician, or a gynecologist. In the future, these family physicians should be trained for the total health care needs of the family. Most physicians who care for the entire family at this time are general practitioners. A majority of them are over the age of 55. The need for well-trained family physicians grows more acute each year. Pediatricians and internists show an increasing interest in sub-specialization. The three year postgraduate training in family practice offers a promising approach to fill the growing vacuum in primary and comprehensive care.

With the increased demand from the consumer for primary and comprehensive care, a new interest among medical students in family practice, there is an urgent need for more residency positions in family practice. Conversion of general practice programs offers a major step in this direction. The development of new residency programs in community hospitals, and with university affiliation, is another means of keeping pace with the demand. Such programs would provide new opportunities for undergraduate training in family practice and for the clinical clerkships in family practice.

Hopefully, in the future:

(1) More family physicians will become board-certified in family medicine which will enhance their status and augment their academic standings
(2) There will be an increased number of residency programs established in community and university hospitals
(3) New departments of family medicine will be established in schools of medicine
(4) Family physicians will become more involved in teaching medical students
(5) As medical students are exposed to family practice, and find it to be logical and beneficial to the patient, challenging and rewarding to the physician, they will be attracted to residency programs.

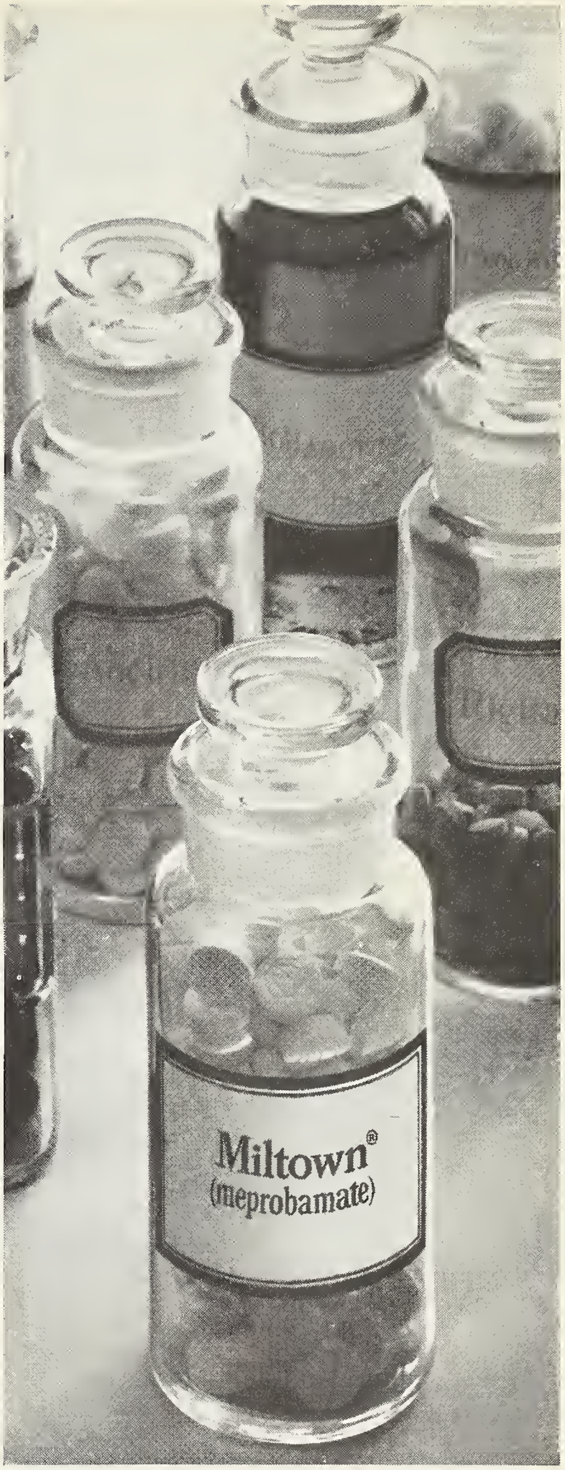
These are dynamic times for family practice. With the understanding of medical specialists of the need for this new specialty, and with the energy and endeavor of practicing family physicians, there is great promise for providing more physicians with the interest, skill, and ability to provide continuing and comprehensive care to the growing numbers of American families.

Summary

Family practice is the twentieth recognized medical specialty. The family physician differs from other medical specialists in that he assumes the responsibility for the comprehensive and continuous health care needs of his patient, within the context of the family group. Because of the complexity of modern medicine, a well-trained physician or personal physician who can deliver comprehensive and continuous care is greatly needed. Hopefully, with the assistance of understanding medical specialists and energetic family physicians, the number of family practitioners will increase in the future, to fill the present void in our health care delivery system.

References

1. Report of the Ad Hoc Committee on Education for Family Practice on the Council of Medical Education. A.M.A.: Meeting the Challenge of Family Practice. Sept. (1966).
2. Dennis, J. L.: Medical Education—Its Responsibility to Society. *J.A.M.A.*, Vol. 213-4 (585-588), July 27, 1970.
3. Geyman, J. P.: Conversion of General Practice Residencies to Family Practice. *J.A.M.A.*, Vol. 215 (11), (1802-1807).
4. McWhinney, I. R.: General Practice as an Academic Disciple. *The Lancet*, Feb., 1966.
5. Land, Francis L.: Developing a Family Practice Department in a Medical School. *Family Physician*, Vol. 3 (5), May, 1971. (159-162).



Still serving...

Miltown®
(meprobamate)

WALLACE PHARMACEUTICALS
Cranbury, N.J. 08512

About doctors

Michael J. Brennan, MD, Detroit,
discussed his work in "Pre-neoplasia in Breast Cancer" at an international symposium on breast cancer Nov. 11 in Camden, N. J. The conference was sponsored by the Institute for Medical Research. Doctor Brennan was chairman of the session on genetics and epidemiology.

D. E. Boblitt, MD, Ann Arbor,
is new director of the Department of Radiology at St. Joseph Mercy Hospital, Ann Arbor. He succeeds L. J. Hancamp, MD, who was director for eight years and will continue in the department as radiologist and counselor.

Jerome W. Conn, MD, Ann Arbor,
a distinguished endocrinologist, is the recipient of the 1971 Health Memorial Award of the Anderson Hospital and Tumor Institute of the University of Texas. The award, made annually to a scientist who has made an outstanding contribution in cancer research, honors Doctor Conn as the first scientist to identify primary aldosteronism, called "Conn's Syndrome." Doctor Conn is head of the U-M Medical Center Division of Endocrinology and Metabolism. He delivered three honorary lectures in November after receiving the prize.

Winthrop N. Davey, MD, Atlanta, Ga.,
formerly of Ann Arbor, received the Bruce Douglas Award of the Michigan TB and Respiratory Disease Association at the association's annual meeting recently. Doctor Davey, new director for university affairs training programs at the Atlanta Center for Disease Control, was honored for his outstanding contributions to tuberculosis treatment and control.

Harold A. Furlong, MD, Pontiac,
was guest of honor at a Founders' Fete dinner recently for the Pontiac Creative Arts Center. Doctor Furlong, Pontiac physician for 43 years and president of the PCAC board since its origin in 1964, was presented with a framed resolution and a medallion from the Impressario Arts Society. Letters of congratulation were read from President Nixon, and Governor Milliken. A bronze head of Doctor Furlong was unveiled.

Robert H. Gregg, MD, Detroit,
is new chairman of the board of Children's Hospital of Michigan, succeeding Hugo V. Hullerman, MD, who is retiring. Doctor Gregg was also elected president, a new position created by the board to increase the hospital's participation with other Detroit Medical Center hospitals and the WSU School of Medicine.

William Haeck, MD, Grand Rapids,
was elected vice chairman of the National Congress of County Medical Societies at its annual meeting in California recently.

Robert M. Heavenrich, MD, Saginaw,
is the president-elect of the American Academy of Pediatrics. He was elected Oct. 20 in Chicago by the 12,500 member organization and has been a member of the AAP executive board since 1966.

Charles O. Long, MD, Lansing,
is the recipient of the Tiffany award for volunteer service in the Michigan Division, American Cancer Society. Doctor Long, a Lansing radiologist since 1955, was named for his work in public education about cancer during the past 15 years.

F. W. Hyde, Jr., MD, Lathrop Village,
is new director of the Grace Hospital, Detroit, where he has served as acting director since the retirement of Roger W. DeBusk, MD, on Nov. 1, 1970.

The new U-M School of Public Health buildings,
formally dedicated last month, have been named for the late Thomas Francis, Jr., MD, former U-M epidemiologist, physician, educator and researcher, and the late Henry Frieze Vaughn, MD, former commissioner of health for Detroit and first dean of the U-M school.

William F. Weinkauf, MD, Corunna,
was honored by his community in mid-October for his 50 years of service as a physician. The celebration included the reading of a proclamation from the mayor.

Specialized Service

IN

PROFESSIONAL LIABILITY INSURANCE

is a high mark of distinction

THE

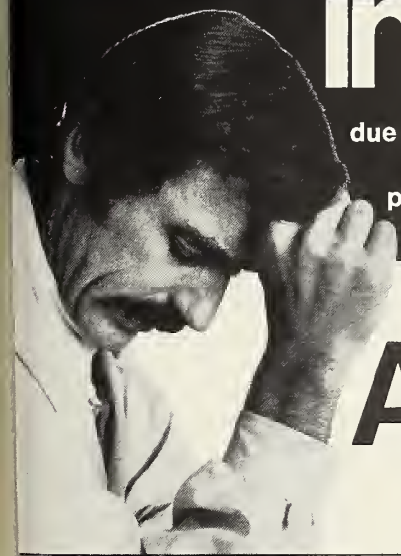
MEDICAL PROTECTIVE COMPANY

FORT WAYNE, INDIANA

Professional Protection Exclusively since 1899

DETROIT OFFICE: R. K. Wind and J. K. Galloway, Representatives
27200 Lahser Road, Southfield 48076, Telephone: (Area Code 313) ELgin 3-4848 or 444-1439

GRAND RAPIDS OFFICE: G. J. Haworth, Representative
422 Federal Square Building, Grand Rapids 49502 Telephone: 616-454-4477



The treatment of

impotence

due to androgenic deficiency in the American male. The concept of chemotherapy plus the physician's psychological support is confirmed as effective therapy.

NEW CLINICAL STUDY

The Treatment of Impotence
with Methyltestosterone Thyroid
(100 patients—Double Blind Study)
T. Jakobovits
Fertility and Sterility, January 1970
Official Journal of the
American Fertility Society

Android®

(thyroid-androgen) tablets

Double-Blind Study and Type of Patient:

100 patients suffering from impotence. Of the patients receiving the active medication (Android) a favourable response was seen in 78%. This compares with 40% on placebo. Although psychotherapy is indicated in patients suffering from functional impotence the concomitant role of chemotherapy (Android) cannot be disputed.

Choice of 4 strengths:

Android

Each yellow tablet contains:
Methyl Testosterone ..2.5 mg.
Thyroid Ext. (1/6 gr.) ..10 mg.
Glutamic Acid ....50 mg.
Thiamine HCL ....10 mg.
Dose: 1 tablet 3 times daily.
Available:
Bottles of 100, 500, 1000.

REFER TO PDR

Android-HP

HIGH POTENCY

Each red tablet contains:
Methyl Testosterone ..5.0 mg.
Thyroid Ext. (½ gr.) ...30 mg.
Glutamic Acid ....50 mg.
Thiamine HCL ....10 mg.
Dose: 1 tablet 3 times daily.
Available:
Bottles of 100, 500, 1000.

Android-X

EXTRA HIGH POTENCY

Each orange tablet contains:
Methyl Testosterone .12.5 mg.
Thyroid Ext. (1 gr.) ....64 mg.
Glutamic Acid ....50 mg.
Thiamine HCL ....10 mg.
Dose: 1 or 2 tablets daily.
Available:
Bottles of 60, 500.

Android-Plus

WITH HIGH POTENCY
B-COMPLEX AND VITAMIN C

Each white tablet contains:
Methyl Testosterone ..2.5 mg.
Thyroid Ext. (¼ gr.) ...15 mg.
Ascorbic Acid (Vit. C) .250 mg.
Thiamine HCL ....25 mg.
Glutamic Acid ....100 mg.
Pyridoxine HCL ....5 mg.
Niacinamide ....75 mg.
Calcium Pantothenate .10 mg.
Vitamin B-12 ....2.5 mcg.
Riboflavin ....5 mg.
Dose: 2 tablets daily.
Available: Bottles of 60, 500.

Contraindications: Android is contraindicated in patients with prostatic carcinoma, severe cardiorenal disease and severe persistent hypercalcemia, coronary heart disease and hyperthyroidism. Occasional cases of jaundice with plugging biliary canaliculi have occurred with average doses of Methyl Testosterone. Thyroid is not to be used in heart disease and hypertension.

Warnings: Large dosages may cause anorexia, nausea, vomiting abdominal pain, diarrhea, headache, dizziness, lethargy, paresthesia, skin eruptions, loss of libido in males, dysuria, edema, congestive heart failure and mammary carcinoma in males.

Precautions: If hypothyroidism is accompanied by adrenal insufficiency the latter must be corrected prior to and during thyroid administration.

Adverse Reactions: Since Androgens, in general, tend to promote retention of sodium and water, patients receiving Methyl Testosterone, in particular elderly patients, should be observed for edema.

Hypercalcemia may occur, particularly in immobilized patients: use of Testosterone should be discontinued as soon as hypercalcemia is detected.

References: 1. **Montesano, P., and Evangeliste, I.** Methyltestosterone-thyroid treatment of sexual impotence. Clin Med 12:69, 1966. 2. **Dublin, M. F.** Treatment of impotence with methyltestosterone-thyroid compound. West Med 5:67, 1964. 3. **Titeff, A. S.** Methyltestosterone-thyroid in treating impotence. Gen Prac 25:6, 1962. 4. **Hellman, L., Bradlow, H. L., Zumoff, B., Fukushima, D. K., and Gallagher, T. F.** Thyroid-androgen interrelations and the hypocholesteremic effect of androsterone. J Clin Endocr 19:936, 1959. 5. **Farris, E. J., and Colton, S. W.** Effects of L-thyroxine and liothyronine on spermatogenesis. J Urol 79:863, 1958. 6. **Osol, A., and Farrar, G. E.** United States Dispensatory (ed. 25). Lippincott, Philadelphia, 1955, p. 1432. 7. **Wershub, L. P.** Sexual Impotence in the Male. Thomas, Springfield, Ill., 1959, pp. 79-99.

ite for literature and samples: BROWN **THE BROWN PHARMACEUTICAL CO., INC.** 2500 West 6th Street, Los Angeles, California 90057

The following information is compiled by the Michigan Department of Public Health as a service to the practicing Michigan physician.

POISON CONTROL CENTERS

City	Name of Center and Street Address	Telephone	Name of Director
	Poison Information Center		
Detroit	Detroit City Health Department 1151 Taylor Avenue 48202	TR 2-1540	William G. Frederick, Sc.D.
	Poison Treatment Centers (Information and Treatment)		
Ann Arbor	University Hospital 1405 E. Ann Street 48104	764-5102	Owen Haig, M.D. Robert Pearson, R.Ph.
Battle Creek	Community Hospital 200 Tompkins Street 49016	Woodward 3-5521	Metta Lou Henderson, R.Ph.
Berrien Center	Berrien General Hospital Dean's Hill Road 49102	471-7761	Richard C. Chaudoir, R.Ph.
Coldwater	Community Health Center of Branch County 274 East Chicago Street 49036	279-9501	John C. Heffelfinger, M.D.
Detroit	Children's Hospital 5224 St. Antoine Street 48202	833-1000	Paul V. Wooley, Jr., M.D. Regine Aronow, M.D., Assoc.
	Mount Carmel Mercy Hospital 6071 West Outer Drive 48235	864-5400	John Moses, M.D. Forrest P. Becker, R.Ph.
Eloise	Wayne County General Hospital 30712 Michigan Avenue 48132	722-2500 ext. 6230 or 6231	Gerald Stair, M.D. Kenneth Vaughn, M.D., Assoc. Director
Flint	Hurley Hospital 6th Avenue & Begole 48502	Cedar 2-1161	William Nichols, M.D., Director Douglas H. Vivian, R.Ph., Coordinator
Grand Rapids	Blodgett Memorial Hospital 1840 Wealthy, S.E. 49506	456-5301	John P. Foxworthy, M.D. Donald Ekdom, R.Ph.
	Butterworth Hospital 100 Michigan, N.E. 49503	451-3591	John R. Wilson, M.D.
	St. Mary's Hospital 201 Lafayette, S.E. 49503	459-3131	Wallace Duffin, M.D. Myrtle McLain, M.D., Assoc. Director
	Grand Rapids Osteopathic Hospital 1919 Boston Street, S.E. 49506	452-5151	Eugene M. Johnson, D.O. Oliver Gysin, R.Ph.
Hancock	St. Joseph's Hospital 200 Michigan Avenue 49930	482-1122	Howard E. Otto, M.D. Sr. Mary Sharon Jones, R.Ph.
Kalamazoo	Bronson Methodist Hospital 252 East Lovell Street 49006	342-9821	H. Sidney Heersma, M.D. Kenneth Huckendubler, R.Ph.
Lansing	St. Lawrence Hospital 1210 West Saginaw Street 48914	372-3610	Howard Comstock, M.D. Richard Campbell, R.Ph.
Marquette	St. Luke's Hospital West College Avenue 49855	Canal 6-3511	Norman Matthews, M.D. Tom Finlan, R.Ph.
Midland	Midland Hospital 4005 Orchard Drive 48640	TE 5-6711	K. W. Linsenmann, M.D. Mrs. Anne Gagne, R.N.
Monroe	Memorial Hospital of Monroe 700 Stewart Road 48161	CH 1-6500	Donald Wojack, R.Ph.
Petoskey	Little Traverse Hospital 416 Connable 49770	Diamond 7-2551	James M. Stamm, R.Ph.
Pontiac	St. Joseph Mercy Hospital 900 Woodward Avenue 48053	338-9111	Robert J. Mason, M.D.
Port Huron	Mercy Hospital 2601 Electric Avenue 48060	Yukon 5-9531	Robert Lugg, M.D.
Saginaw	Saginaw General Hospital 1447 N. Harrison Road 48602	753-3411	Wm. G. Mason, M.D. Dale Schultz, R.Ph.
Traverse City	Munson Medical Center Traverse City 49684	947-6140	Philip K. Wiley, M.D. A. McCrackin, R.Ph.

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

Statement required by the Act of October 23, 1962; Section 4369, Title 39 of the United States Code showing the Ownership, Management and Circulation of Michigan Medicine, published four times in December and January and three times in all the other months, 38 issues, mailed at East Lansing, Michigan in Ingham County for December 1, 1971.

1. The office of the publisher is located at 120 West Saginaw Street, East Lansing, Michigan 48823.
2. The general business office of the publisher is located at 120 West Saginaw Street, East Lansing, Michigan 48823.
3. The publisher is the Michigan State Medical Society. The Scientific Editor is John W. Moses, M.D., Mt. Carmel Mercy Hospital, Detroit, Michigan 48235; The Managing Editor is Judith Marr, 120 West Saginaw Street, East Lansing, Michigan 48823; The Executive Editor is Herbert A. Auer, 120 West Saginaw Street, East Lansing, Michigan 48823.
4. The owner is the Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.
5. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: None.
6. A. The total number of copies printed averages 8,130 per issue with a single issue nearest to filing date accounting for 8,084 copies.
   B. Paid circulation:
   7,367 subscriptions by mail, these being the active members of the Michigan State Medical Society who receive subscriptions.
   C. Sales to dealers, number none.
   D. Free distribution by mail carrier or other means: 540.
   E. Total number of copies distributed is 7,907.

I certify that the statements made by me above are correct and complete.

Wellman Press, Inc.
For the Publisher

Speakers all set for 1972 Conference on Maternal Health

Physicians from Chicago; Madison, Wis.; Bethesda, and Durham, N.C., are among the speakers scheduled for the 11th Annual Michigan Conference on Maternal and Perinatal Health. The conference will take place March 29-30 at the Olds Plaza Hotel, Lansing.

Speakers who have agreed to take part in the MSMS-sponsored program are:

Henry L. Nadler, MD, chairman of pediatrics, Northwestern University Medical School, and chief of staff, Children's Memorial Hospital, Chicago;

Stanley N. Graven, MD, Madison, Wis., associate professor, Department of pediatrics and co-director of perinatal care, University of Wisconsin;

Harry M. Meyer, MD, chief, Laboratory of Viral Immunology, Division of Biologic Standards, National Institutes of Health, Bethesda, Md.;

George W. Brumley, MD, assistant professor of pediatrics and director of newborn services, Duke University Medical Center, Durham, N.C.

Ulcer Relief!

Dicarbosil®
ANTACID
Your ulcer patients and others will respond favorably to it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

ARCH LABORATORIES
319 South Fourth Street, St. Louis, Missouri 63102

MAILBAG

California doctor praises maternal desk reference cards

William W. Jack, M.D.
1810 Wealthy Street S.E.
Grand Rapids, Michigan 49506

Dear Bill:

Upon returning to my office this week after a two week absence I found in my collection of mail the Maternal Health Desk Reference cards which you so kindly forwarded at my request.

A quick review of these cards has revealed them to be a most concise and helpful collection of extremely important and useful information. I am anxious to give them a more detailed study and know I will have occasion to refer to them at many future times.

You and your Committee in Michigan are to be congratulated on this excellent piece of work and I assure you that I am most happy to have these cards in my possession. Thank you again for your kindness in making them available to me.

I will look forward to seeing you again soon at our next AMA Committee session.

Sincerely yours,
Herbert A. Holden, M.D.
Lincoln Medical Group
San Leandro, Calif.

Editor's Note: Doctor Jack is former chairman of the MSMS Maternal and Perinatal Health Committee.

Doctor Mayne urges MSMS to ask legislative look into contingency fees

To the Editor:

I was interested in reading your latest September 30, 1971, issue of *Michigan Medicine* in respect to the conference on medical malpractice with regard to attempting to interest insurance companies to offer professional liability.

I feel this is going at it the wrong way, unfortunately. We are not meeting the basic problem with regard to medical malpractice, which is the unnecessary lawsuits that I am firmly convinced come totally from the fact that contingency fees are still allowed in the State of Michigan.

Hunting up more companies to cover professional liability is simply giving the attorneys assurance that there is money available for them to sue for. I think a strong stand should be taken by the Michigan State Medical Society to attempt to have the legislature look into the inadequacies of the adversary system with regard to contingency fees. This problem is going to rapidly come to a head if and when no-fault auto insurance comes in . . . the doctor is going to be the only one left at the present time who can be sued for big money.

In a recent personal survey taken in the City of Saginaw, we have at least thirty physicians in Saginaw who have been sued from one to four times. We, hopefully, do not have that many bad doctors!

It is realized that the problem in attempting to change the legal system in Michigan is going to be a great one since many of the people in the legislature are lawyers themselves and are not going to want to do something that might hamper their income should they lose an election and go back into law. However, I think this is the tactic we should be taking more than trying to just simply obtain coverage.

Sincerely yours,
Ben R. Mayne, M.D.

Doctor Levine urges MSMS to remind legislators of new Shield organization

To the editor:

In the Oct. 30 *Medigram* there is a report concerning Representative Martha Griffiths' conversation with HEW Secretary Richardson concerning the Kennedy-National Health Service Bill. It is reported that Representative Griffiths quoted a State Senator as saying that "one cannot expect organizations run by physicians" to regulate physicians fees.

I would hope that MSMS would have located the State Senator involved, and reminded both this individual as well as Representative Griffiths, that Michigan Blue Cross-Blue Shield is no longer run by physicians and they will have to find another whipping boy to blame for the high cost of medical care. Perhaps all our State Representatives and Senators should be reminded that the physicians of this state are no longer associated with Blue Cross-Blue Shield except insofar as Michigan Medical Service appoints certain physicians to the board, but not as representatives of the State Society.

Very truly yours,
Mark C. Levine, M.D., F.A.C.P.

518 freshmen enrolled this year in Michigan med schools

A total of 518 freshman students are enrolled in Michigan's three medical schools for the 1971 academic year. That is 89 more freshmen than were enrolled for the 1970-71 academic year.

There are 85 freshmen at Michigan State University's College of Human Medicine, 208 in Wayne State University's School of Medicine and 225 in the University of Michigan's Medical School.

In 1970-71, there were 40 freshmen in the MSU College, 165 freshmen in the WSU School of Medicine and 224 in the U-M Medical School.

Harry A. Towsley visiting professorship funds growing

As of Nov. 10, $58,224 had been pledged for the new Harry A. Towsley Visiting Professorship in the University of Michigan Medical School. The fund was first announced at a testimonial dinner last June in Doctor Towsley's honor on his retirement.

The fund, which will bring distinguished physicians from other academic institutions, medical centers or hospitals to the U-M campus, will become operative when the underwriting reaches $100,000.

The visiting professor is to participate in the activities of the department or section to which he is appointed, in other appropriate medical center activities and in educational activities in Michigan community hospitals.

Doctor Towsley, a pediatrician, was chairman of the U-M Department of Postgraduate Medicine from 1967-1971, and is chairman and long-time member of the MSMS Committee on Postgraduate Medicine.

MDs get 22% of health dollars

Who gets the health dollars? *Perspective Magazine,* as excerpted in the Michigan Blue Shield *Management Digest,* divides them this way:

"Of the $67.2 billion spent on health care in fiscal 1970, $58 billion went for personal health services, the remaining $9 billion went for research and construction.

"Of the $58 billion spent for 'personal health services,'

. . . hospitals got 44%

. . . doctors got 22%

. . . pharmacists got 12%

. . . dentists got 7%

. . . another 15% went for supplies, equipment, private-duty nursing, nursing homes, etc.

"As hospitals get a bigger share of the health pie, doctors get a smaller bite (hospitals having jumped from 35% to 44% in 20 years, and doctors having meanwhile dropped from 25% to 22%)," says *Perspective.*

"The shift comes partly from greater incidence of hospitalization and greater use of the hospital's out-patient department, for both emergencies and routine care . . . partly from lack of available medical skills. The trend could be reversed with comprehensive neighborhood health centers with diagnostic and screening services built on top of accessible primary physicians."

Michigan med students may study in any of state's three schools

Students in Michigan's four medical schools may study at each other's schools under a cooperative agreement allowing them full credit for courses taken as electives at any one of the colleges.

The agreement was signed by Deans Thomas N. Evans, MD, WSU School of Medicine; John A. Gronvall, MD, U-M Medical School; Andrew D. Hunt, Jr., MD, MSU College of Human Medicine, and Myron S. Magen, DO, MSU College of Osteopathic Medicine.

The agreement is one of the activities of the Michigan Medical Schools Liaison Committee formed in 1970.

SYNTHROID
T4

RADAR
AHEAD

HISTORICAL
MARKER

T_4 IS THE PREDICTABLE HORMONE BECAUSE IT LOVES PROTEIN.

SYNTHROID® (sodium levothyroxine) is pure synthetic T_4, the major circulating thyroid hormone. It is reliable to use because of its affinity for protein-binding sites in the blood. T_3 is more fickle. Sometimes it binds. Sometimes it doesn't. T_4 more *predictably* binds to protein.

Synthroid®
(sodium levothyroxine)

ALL THYROID-FUNCTION TESTS ARE USEFUL IN MONITORING SYNTHROID THERAPY.

No calculations are needed, test interpretation is simple.

Any of the commonly used T_4 thyroid function tests (P.B.I., T_4 By Column, Murphy-Pattee, Free Thyroxine) are useful in monitoring patients on T_4 because they *all* measure T_4. Patients on SYNTHROID are thereby easy to monitor because their results will fall within predictable, elevated test ranges. Of course, clinical assessment is the best criterion of the thyroid status of the drug-treated patient.

TWO GOOD REASONS WHY THE ROAD TO NORMALIZED THYROID STATUS IS SO SMOOTH FOR THE SYNTHROID PATIENT.

(1) The onset of action of T_4 is gradual. It has a long in vivo "half-life" of over six days. (Occasional missed doses or accidental double-doses are of le concern because of this factor)[1]; (2) since SYNTHROID contains or T_4, the potential for metabolic surges traceable to more potent iodides (T_3) is eliminated.

---

1. Latiolais, C. J., and Berry, C. C.: Misuse of Prescription Medications by Outpatients, *Drug Intelligence & Clin. Pharm.* 3:270-7, 19

TEST	HYPOTHYROID	SYNTHROID THERAPEUTIC NORMAL
P.B.I.	Less than 4 mcg %	6-10 mcg %
T_4 By Column	Less than 3 mcg %	7-9 mcg %
T_3 (Resin)	Less than 25%	27-35%
T_3 (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

Choose the Smooth Road ...to thyroid replacement therapy

MERGING
TRAFFIC

WHY DOES SYNTHROID COST LESS THAN SYNTHETIC DRUGS CONTAINING T_3?

ery simple. T_3 costs more to make ynthetically than does T_4. So it is conomically necessary for a ynthetic thyroid medication ontaining T_3 to cost more than ne containing T_4 alone. Synthetic ombinations cost patients nearly 0% more than SYNTHROID[3] ecause the T_3 costs more to start ith; also there is the additional xpense of formulating a tablet ontaining two active ingredients.

American Druggist BLUEBOOK, March, 1971.

KNOWLEDGE OF THE '70's CHALLENGES CUSTOMS CONCERNING DESICCATED THYROID DRUGS.

In the past, desiccated thyroid produced from animal glands was considered "good, and cheap." We now know that improved products are available and the price difference has narrowed to the point of being inconsequential. (SYNTHROID, for instance, costs patients about a penny a day more than brands of desiccated thyroid.)

What does this additional $3.65 a year buy the patient? Quite a bit in terms of quality, reliability and service.

SWITCHING PATIENTS TO SYNTHROID IS EASY.

Switching present patients to SYNTHROID (or starting new ones) is a simple matter. SYNTHROID is available in the widest range of dosage strengths of any thyroid drug. Seven scored, color-coded tablet strengths are available plus a lyophilized injectable form for emergency or postoperative uses.

RESPONSE, RELIABILITY, SERVICE—COMPARISON OF FIVE PARAMETERS

PARAMETERS	DESICCATED THYROID U.S.P.	SYNTHROID® (sodium levothyroxine)
SOURCE OF HORMONE	Animal glands (swine, sheep, cows). Hormone content of glands and ratio of T_3-T_4 varies by type of animal, season in which gland is harvested, and diet of animal. [1, 2, 3, 4, 5]	Synthetically derived pure crystalline hormone. Because no animal protein is present, no objectionable odor occurs upon aging.
GENERAL ASSAY TECHNIQUE	"Its major disadvantage is inadequate standardization of hormonal content."[8]	Unlike desiccated thyroid U.S.P., thyroxine does not require biologic standardization to establish its potency. [2, 6] Crystalline T_4 is used. Purity is verified by paper chromatography. Content of tablets is standardized by weight.
CLINICAL RESPONSE	"T_3 and T_4 ratio varies according to gland source. Fluctuations in response can occur. Potency can vary."[3]	"Sodium levothyroxine has been extensively used with satisfaction and is widely held to be superior to (desiccated) thyroid."[7] "There are well documented examples of patients who failed to respond satisfactorily to desiccated thyroid but subsequently responded to (sodium-1) thyroxine."[4]
PREDICTABILITY	Failure of thyroid U.S.P. treated patients to show clinical improvement and/or lack of correlation in clinical findings to thyroid function test results has been frequently discussed in the literature.[8, 9, 10, 11, 12, 13, 14, 15, 16] Regardless of which factor or factors accounts for this phenomenon the fact remains that discrepancies do occur.	Test results predictably elevated. ". . . oral potency of this material is attested to by a uniformly good clinical response corroborated by a prompt and sustained increase in the serum PBI levels."[16]

1. Mangieri, C. N. and Lund, M. H.: Potency of United States Pharmacopeia desiccated thyroid tablets as determined by the antigoitrogenic assay in rats, J. Clin. Endocrinol. Metab., *30*:102-4, 1970.
2. Lavietes, P. H. and Epstein, F. H.: Thyroid therapy of myxedema: a comparison of various agents with a note on the composition of thyroid secretion in man, Ann. Intern. Med., *60*:79-87, 1964.
3. Armour Pharmaceutical Company—discussing Armour Thyroid, PROLOID, other generics. Literature No. 21329—274—YZ—1—IM 2/71.
4. Abelson, D. M.: Hypothyroidism, Med. Sci., *10*:442-8, 1961.
5. McGregor, A. G.: Why does anybody use thyroid B. P.?, Lancet, *1*: 329-32, 1961.
6. Hart, F. D. and Maclagen, N. F.: Oral thyroxine in treatment of myxedema, Brit. Med. J., *1*:512-8, 1950.
7. Goodman, L. S. and Gilman, A.: The Pharmacological Basis of Therapeutics, 4th Ed. p. 1479, New York: Macmillan, 1970.
8. Harrison, T. R., et al.: Principles of Internal Medicine, 6th ed. p. 456. Philadelphia: Blakiston, 1970.
9. Braverman, L. E. and Ingbar, S. H.: Anomalous effects of certain preparations of desiccated thyroid on serum protein-bound iodine, New Eng. J. Med., *270*:439-42, 1964.
10. Green, W. L.: Guidelines for the treatment of myxedema, Med. Clin. N. Amer., *52*:432-50, 1968.
11. Dowling, J. T.: Hypothyroidism in Current Therapy, Conn. H. F., ed. pp. 345-7. Philadelphia: Saunders, 1964.
12. Dunn. J. T.: Excessive dose of thyroid medication in hypothyroidism, J. Am. Med. Assn., *216*:152, 1971.
13. Runyan, J. W.: Hypothyroidism and myxedema, J. Tenn. State Med. Assn., *56*:391-4, 1963.
14. Albright, E. C.: Use and abuse of thyroid hormones, comments on treatment, Marquette University, Milwaukee, Wisc.
15. Catz, B.: Ginsburg, E. and Salenger, S.: Clinically inactive thyroid U.S.P.: a preliminary report, New Eng. J. Med., *266*:136-7, 1962.
16. Bartuska, D. G., et al.: Desiccated thyroid U.S.P. or sodium l-thyroxine?, J. Amer. Med. Women's Assn., *21*:137-9, 1966.

See next pages for prescribing information.

PATIENTS CAN BE SUCCESSFULLY MAINTAINED ON A DRUG CONTAINING THYROXINE ALONE.

Thyroxine (T_4) is, as you know, the major circulating hormone produced by the thyroid gland. T_3 is also produced, in smaller amounts, and is active at the cellular level. For years it has been a working hypothesis among endocrinologists that T_4 is converted by the body to T_3. In 1970 this process, called "deiodination," was demonstrated by Sterling and Braverman[2]. T_4 does convert to T_3, though the precise quantities are still being studied.

The conversion has been clinically demonstrated during the administration of T_4 to athyrotic patients. Their thyroid status is normalized on SYNTHROID alone, yet the presence of T_3 in these patients has been clearly shown.

REST
AREA
1/2 MILE

CONSIDERATE LONG-TERM THERAPY FOR THE PATIENT.

Predictable patient response, of course, is more important than price. You do get complete clinical response with the single-entity synthetic, SYNTHROID. And, at a reasonable cost to the patient. In some short term situations, T_3 drugs can be useful but, in long term therapy, the smooth road provided by SYNTHROID may be the better route.

SYNTHROID, with its smooth road to complete thyroid replacement therapy, has been selected for more patients in the United States and Canada than any other brand of thyroid medication.

AS WITH ANY THYROID PREPARATION, CAUTIOUS OBSERVATION OF THE PATIENT DURING THE BEGINNING OF THERAPY WILL ALERT THE PHYSICIAN TO ANY UNTOWARD EFFECTS.

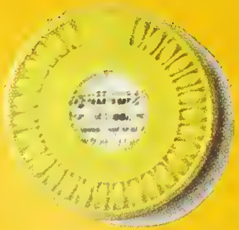
Side effects, when they do occur, are related to excessive dosage. Caution should be exercised in administering the drug to patients with cardiovascular disease. Read the accompanying prescribing information for additional data or write Flint Laboratories.

---

2. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T4) to Triiodothyronine (T3) in Athyreotic Human Subjects, *J. Clin. Invest.* **49**:855-64, 1970.

Choose the Smooth Road *...to thyroid replacement therapy*

0.05 mg.


0.1 mg.

0.15 mg.

0.2 mg.

FREE TAB-MINDER medication dispensers—color-coded in 4 dosage strengths—get patients off to a good start and encourage regular habit patterns. Contain free 4-weeks' supply of SYNTHROID, and are reusable for maintenance dosage.

APPROXIMATE DOSAGE EQUIVALENTS*

			Animal Gland		
CYTOMEL (Sodium liothyronine) Synthetic T_3	EUTHROID** (Liotrix) Synthetic T_3-T_4	THYROLAR*** (Liotrix) Synthetic T_3-T_4	Desiccated (Thyroid, USP) Cow, sheep or hog thyroid	PROLOID (thyroglobulin) Frozen hog thyroid	SYNTHROID (Sodium levothyroxine) Synthetic T_4
Unscored 5 mcg.	N.A.	N.A.	unscored ¼ gr.	¼ gr.	0.025 mg.
N.A.	½	½	unscored ½ gr.	½ gr.	0.05 mg.
25 mcg.	1	1	unscored 1 gr.	1 gr.	0.1 mg.
N.A.	N.A.	N.A.	N.A.	1½ gr.	0.15 mg.
50 mcg.	2	2	unscored 2 gr.	2 gr.	0.2 mg.
N.A.	3	3	unscored 3 gr.	3 gr.	0.3 mg.
N.A.	N.A.	N.A.	unscored 5 gr.	5 gr.	0.5 mg.
N.A.	N.A.	N.A.	N.A.	N.A.	Injectable 500 mcg.

N.A. = Not Available Commercially

*Equivalents shown are chemical, and do not take into consideration individual patient variables. Clinical effect is approximate and should be monitored when converting a patient to SYNTHROID. This is particularly important in patients previously on desiccated thyroid. In these patients, lower doses of SYNTHROID may produce the same metabolic effect.

**Euthroid (#1 tablet) contains 60 mcg. of T_4 and 15 mcg. of T_3.

***Thyrolar (#1 tablet) contains 50 mcg. of T_4 and 12.5 mcg. of T_3.

Synthroid®
(sodium levothyroxine)

Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) **for Injection** is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

TOLL
AHEAD
SYNTHROID
T4
YIELD
R
R
BUMP
STOP

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC
Morton Grove, Illinois 60053

THE FACTS ARE CLEAR AND HERE IS OUR OFFER.

Synthetic thyroid drugs are an improvement over animal gland products. Patients, even athyrotic ones, can be completely maintained on SYNTHROID (T_4) alone. Thyroid function tests are easy to interpret since they are *predictably* elevated when the patient adheres to SYNTHROID. Of all synthetic thyroid drugs, SYNTHROID is the most economical to the patient.

AA

OFFER:
Free TAB-MINDER medication dispensers to start or convert all your hypothyroid patients to SYNTHROID. Free information to physicians on role of thyroid function tests in a new booklet titled: "Guideposts to Thyroid Therapy." Ask us.

Name

Address

City State Zip

Details of construction of the Webber Building of Harper Hospital in the Detroit Medical Center are explained by Charles L. Bailey (foreground), construction superintendent. Looking at construction drawings with him are, left to right, John R. McDonald, MD, chief pathologist of Harper Hospital; Richard Sejnost, hospital administrator; Frank J. Brady, vice president of the architectural firm which designed the building; William T. Gossett, hospital trustee, and William Baldwin, also a trustee.

Grand Rapids links four hospitals with emergency radio

A two-way radio hookup linking Grand Rapids' four acute care hospitals for cooperation in emergency medical care is expected to be fully operational by January.

The emergency communications system will guarantee maximum mobilization in the event of an emergency. Such a system, called the Hospital Emergency Radio Network, is being promoted in all areas of the state by the Michigan Hospital Association and the Michigan Emergency Services Health Council. It is planned for each local communications system to be linked with the statewide Hospital Emergency Radio Network of the Michigan Hospital Association.

Grand Rapids is the most recent of several areas to establish the communications network between its hospitals.

Illinois foundation to control hospitalization of welfare recipients

The Illinois Foundation for Medical Care agreed to administer a program for the state to establish rigid control over hospitalization of welfare recipients. The foundation will get $10 for each medical admission under the program announced by Gov. Richard Ogilvie.

He said the Hospital Admission and Surveillance Program will control the length of hospital stays and monitor the quality of hospital care. HASP actually will be operated by the Illinois State Medical Society through the foundation.

Ogilvie said the program could, by trimming welfare recipients' hospitalization an average of a day, save the state $12 million the first year. HASP will establish specific standards for length of stay for various illnesses and Medicaid patients will be certified for the appropriate length of stay in advance. If they require longer hospitalization, they will be recertified.

Jackson Council tackles peer review, hospital staff policies

The new Council of Medical Staffs of Jackson, Hillsdale and Lenawee counties has already swung into action.

Its 250 members originated the ideas behind Resolution 40 on peer review which was passed by the MSMS House of Delegates meeting at the Annual Session Oct. 3-5 in Grand Rapids.

The Council now is encouraging local hospitals to consider its proposal that members of hospital medical staffs be discharged only by their own medical staffs and not by the hospital boards of trustees, and only for reasons of medical incompetence, or unethical practices.

The council works through an executive committee of members elected by the various hospital staffs in the tri-county area. It meets monthly in the office of Richard Deming, MD, council organizer and former Jackson County Medical Society president. A similar council exists in the Detroit area.

Triaminic
Relieves stuffy and runny noses - promptly.
Makes your patient's world a little sunnier.

Triaminic®

phenylpropanolamine hydrochloride, pyrilamine maleate, pheniramine maleate

"the Sunshine Tablet"

Formula: Each timed-release tablet contains phenylpropanolamine hydrochloride, 50 mg.; pyrilamine maleate, 25 mg.; pheniramine maleate, 25 mg. **Indications:** Relief from such symptoms as nasal congestion, profuse nasal discharge and postnasal drip associated with colds, nasal allergies, sinusitis and rhinitis. **Precautions:** Patients should not drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in the presence of hypertension, hyperthyroidism, cardiovascular disease, or diabetes. **Side Effects:** Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. **Dosage:** Adults—one tablet swallowed whole, in morning, midafternoon and before retiring. **Availability:** In bottles of 100, 250.

Rx
ONLY

Dorsey Laboratories, Lincoln, Nebraska, 68501

in cardiac edema

Trademark

Dyazide®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

gets the water out

spares the potassium

Before prescribing, see complete prescribing information in SK&F literature or *PDR*.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome, late pregnancy; also steroid-induced and idiopathic edema, and edema resistant to other diuretic therapy. 'Dyazide' is also indicated in the treatment of mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (> 5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., certain elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—they can both cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules.

SK&F

SK&F Co., Carolina, P.R. 00630
a subsidiary of Smith Kline & French Laboratories

DZ-108

In summary, we did not exaggerate the risk of halothane administration "out of all proportion to the facts." Nor did we attempt to advise anesthesiologists "how to run their practice and choose their drugs." We did wish to draw attention to the possible hazards associated with the use of halothane and methoxyflurane and to make a constructive suggestion as to how second exposures might be avoided. The evaluation of the etiology of disease certainly falls within the province of the pathologist and we can only hope that the "hands off" approach advocated by Seigne et al is not widespread among the members of their specialty.

Very truly yours,
Jay M. McDonald, MD
A. R. W. Climie, MD

Bibliography

1. Seigne, T. D. et al. *Michigan Medicine,* 70:1030-1032, 1971.
2. McDonald, J. M., Nam, S. H., and Climie, A. R. W.: "Halothane, Methoxyflurane and Hepatic Necrosis." *Michigan Medicine,* 70:815-820, 1971.
3. Subcommittee on the National Halothane Study of the Committee on Anesthesia, National Academy of Science—National Research Council: "Summary of the National Halothane Study. Possible Association between Halothane Anesthesia and Postoperative Hepatic Necrosis." *JAMA,* 197:775-778, 1966.
4. Gall, E. A.: "Report of the Pathology Panel—National Halothane Study." *Anesthesiology,* 29:233-248, 1968.
5. Babior, B. M., and Davidson, C. S.: "Postoperative Massive Liver Necrosis." *New Eng. J. Med.,* 276: 645-652, 1967.
6. Aach, R. (Discussant): "Halothane and Liver Failure." *JAMA,* 211:2145-2147, 1970.
7. Peters, R. L., Edmondson, H. A., Reynolds, T. B. et al: "Hepatic Necrosis Associated with Halothane Anesthesia." *Am. J. Med.,* 47:748-764, 1969.
8. Klatskin, G. in Fink, B. R. (Ed.): *Toxicity of Anesthetics,* Baltimore: Williams and Wilkins, Co., 1968, pp. 159-175.
9. Slater, E. M., Gibson, J. M., Dykes, M. H. M. et al: "Postoperative Hepatic Necrosis—Its Incidence and Diagnostic Value in Association with the Administration of Halothane," *New Eng. J. Med.,* 270:983-987, 1964.
10. Herber, R. and Specht, N. W.: "Liver Necrosis Following Anesthesia." *Arch. Intern. Med.,* 115: 266-272, 1965.
11. Keeri-Szanto, M. and Lafleur, F.: "Post-anesthetic Liver Complications in a General Hospital: A Statistical Study." *Can. Anaes. Soc. J.,* 10:531-538, 1963.
12. Gingrich, T. F. and Virtue, R. W.: "Postoperative Liver Damage: Is Anesthesia Involved?" *Surgery,* 57:241-243, 1965.
13. DeBacker, L. J. and Longnecker, D. S.: "Prospective and Retrospective Searches for Liver Necrosis Following Halothane Anesthesia." *JAMA,* 195:157-160, 1966.
14. Trey, C., Lipworth, L., Chalmers, T. C. et al: "Fulminant Hepatic Failure—Presumable Contribution of Halothane." *New Eng. J. Med.,* 279:798-801, 1968.
15. Trey, C., Lipworth, L. and Davidson, C. S.: "The Clinical Syndrome of Halothane Hepatitis." *Anesth. Analg.,* 48:1033-1042, 1969.
16. Klatskin, G. and Kimberg, D. V.: "Recurrent Hepatitis Attributable to Halothane Sensitization in an Anesthetist." *New Eng. J. Med.,* 280:515-522, 1969.
17. Artusio, J. F., Jr., Guest Discussion Following "The Clinical Syndrome of Halothane Hepatitis." Trey, C., Lipworth, L. and Davidson, C. S. *Anesth. Analg.,* 48:1033-1042, 1969.

---

81 hours of training now offered Lansing ambulance crews

A 13-week course in basic training for emergency medical technicians is being sponsored in Lansing by the Tri-County Emergency Medical Services Council.

The 81-hour course was launched in September by the council, the Michigan Department of Public Health and the Michigan Office of Highway Safety Planning.

The Tri-County Council is the first of the 14 state councils to offer the course, which it is hoped will eventually involve all area persons engaged in providing emergency medical care services, such as policemen, firemen and ambulance personnel.

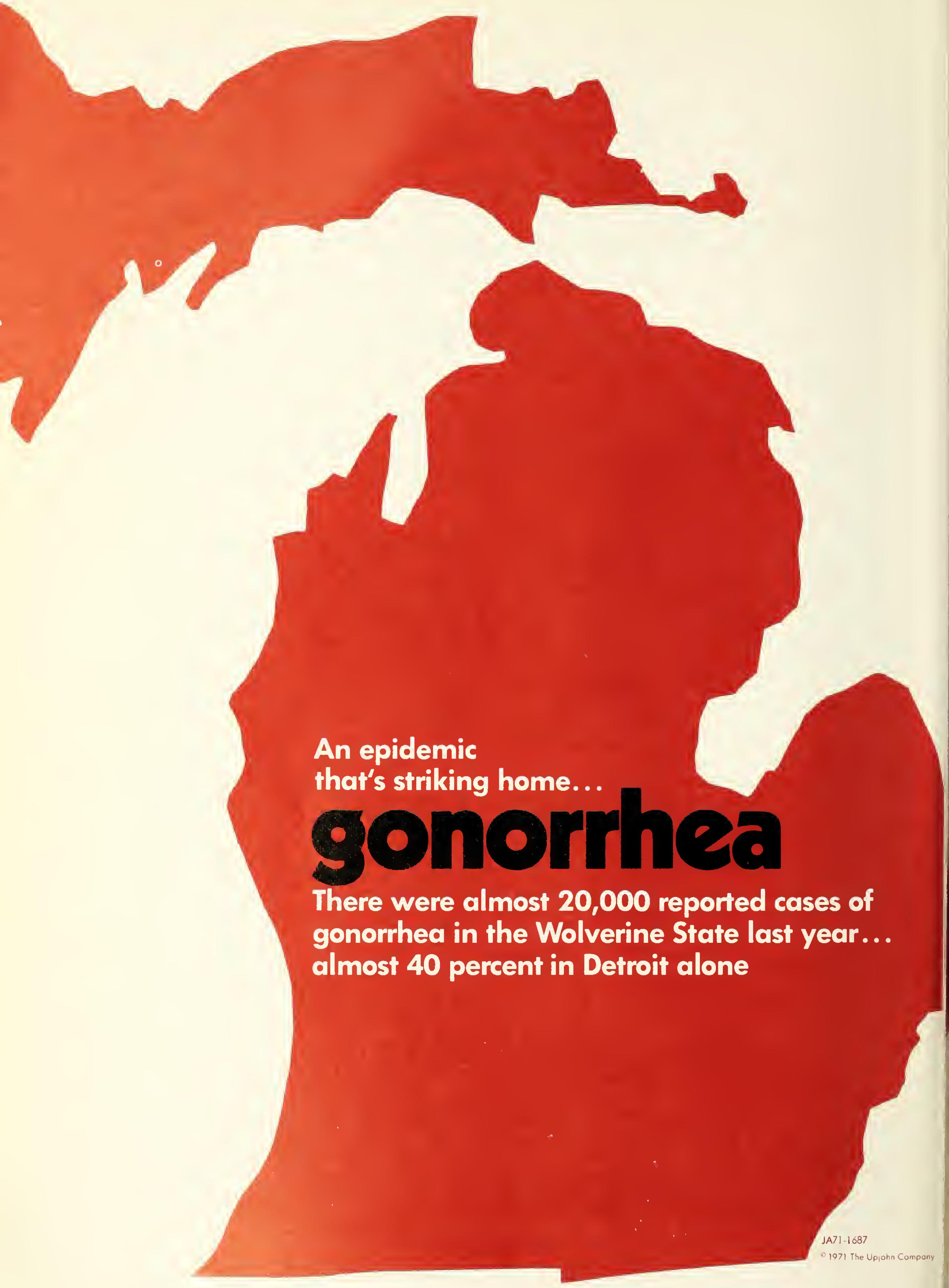
A number of local physicians of many specialties have volunteered to serve as course instructors.

Actors are 'patients' in special U M teaching program

First-year medical students at the University of Michigan are learning to take case-histories by practicing with "patients" portrayed by actors and actresses.

The role-playing program, in its third year at the U-M Medical Center, utilizes 10 U-M drama students who are assigned a disease and a personality type to portray. A group of 20 medical students then takes turns at eliciting the complex medical history.

Richard D. Judge, MD, clinical associate professor of internal medicine, is supervisor of the interviewing program.



An epidemic
that's striking home...

gonorrhea

There were almost 20,000 reported cases of gonorrhea in the Wolverine State last year... almost 40 percent in Detroit alone

JA71-1687

© 1971 The Upjohn Company

In Michigan . . . and everywhere else . . .
a new alternative

NEW **Trobicin**® SPECTINOMYCIN
DIHYDROCHLORIDE, PENTAHYDRATE, UPJOHN

single-dose treatment for intramuscular use only

a chemically distinct antibiotic indicated specifically
for treatment of acute gonorrhea:
in the male–acute urethritis and proctitis
in the female–acute cervicitis and proctitis
when due to susceptible strains of *N. gonorrhoeae*

High cure rate:*96% of 571 males, 95% of 294 females
(Dosages, sites of infection, and criteria
for diagnosis and cure are defined on page 3 of advertisement)

Assurance of a single-dose, physician-controlled treatment schedule

No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed

Active against most strains of Neisseria gonorrhoeae *in vitro*
(M.I.C. 7.5-20 mcg/ml)

A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour
(average serum concentrations of 15 mcg/ml present 8 hours after dosing)

NOTE: Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

For full prescribing information, including contraindications, warnings and precautions, please see last page of this advertisement.

*Data compiled from reports of 14 investigators.

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001

Trobicin and the gonorrhea challenge

An accelerating epidemic—a decelerating susceptibility to penicillin

Gonorrhea is now the most prevalent reported communicable disease in the nation. The estimated number of new cases of gonorrhea in the United States exceeded two million for the first time in 1970. To compound the problems, strains of *N. gonorrhoeae* increasingly resistant to penicillin and other antibiotics are appearing throughout the country. Schedules of treatment which were effective only a few years ago now result in a significant percentage of treatment failure. *In vitro* studies have demonstrated that resistance of *N. gonorrhoeae* may also develop to Trobicin.

Thus, while aqueous Procaine Penicillin G remains the drug of choice for the majority of patients, the need for a non-penicillin, intramuscular antibiotic for acute gonorrhea in the male and female is abundantly clear. Such an antibiotic should be effective following a single intramuscular injection —and it should not demonstrate cross-resistance with penicillin

Trobicin—a new alternative specifically for the treatment of acute gonorrhea

Trobicin is indicated in the treatment of acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

High cure rates:
96% of 571 males, 95% of 294 females

No allergic reactions occurred in patients with an alleged history of penicillin hypersensitivity when treated with Trobicin, although penicillin antibody studies were not performed.

Chemically distinct

Trobicin is structurally not related to any other antibiotic commonly used to treat gonorrhea.

The assurance of a single-dose, physician-controlled treatment schedule

Intramuscular injections should be made deep into the upper outer quadrant of the gluteal muscle.

Adult male: Single 2 gram dose I.M. in acute gonorrheal urethritis. Single 4 gram dose I.M. (should be divided between two gluteal injection sites) in gonorrheal proctitis and in patients being re-treated after failure of previous antibiotic therapy. In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams intramuscularly is preferred.

Adult female: Single 4 gram dose I.M. (should be divided between two gluteal injection sites) in acute gonorrheal cervicitis and proctitis.

Safety for use in pregnancy has not been established, nor has safety for use in infants and children.

Clinical Results with Single-Dose Treatment, Intramuscularly* (Data compiled from reports of 14 investigators**)

	Dosage	Number of Patients	Number Cured	Percent Cured
Adult Males: Gonorrheal urethritis	**2 grams** **4 grams**	**475** **96**	**457** **93**	**96%** **97%**
Adult Females: Gonorrheal cervicitis	**4 grams**	**294**	**280**	**95%**

Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin medium in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluatable and were not included in the table above.

The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

*4-gram doses were injected in two gluteal sites.

**Medical Research Files, The Upjohn Company

a chemically distinct antibiotic indicated
specifically for treatment of
acute gonorrheal urethritis and proctitis in males
and cervicitis and proctitis in females
when due to susceptible strains of *N. gonorrhoeae*

new **Trobicin**®

STERILE SPECTINOMYCIN DIHYDROCHLORIDE
PENTAHYDRATE, UPJOHN

single-dose treatment for intramuscular use only

Sterile Trobicin®
(spectinomycin dihydrochloride pentahydrate)—For Intramuscular injection:
2 gm vials containing 5 ml when reconstituted with diluent. 4 gm vials containing 10 ml when reconstituted with diluent.

An aminocyclitol antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

Indications: Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis in the female when due to susceptible strains of *N. gonorrhoeae*.

Contraindications: Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

Warnings: Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully examined and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected.

Safety for use in infants, children and pregnant women has not been established.

Precautions: The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance of *N. gonorrhoeae*.

Adverse reactions: The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, chills, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple-dose studies in normal volunteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

Dosage and administration: Keep at 25°C and use within 24 hours after reconstitution with diluent.

Male—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being re-treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.

Female— single 4 gram dose (10 ml) intramuscularly.

How supplied: *Vials, 2 and 4 grams —with ampoule of Bacteriostatic Water for Injection with Benzyl Alcohol 0.9% w/v.* Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only.

Susceptibility Powder—for testing *in vitro* susceptibility of *N. gonorrhoeae*.

Human pharmacology: Rapidly absorbed after intramuscular injection. A two-gram injection produces peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.

For additional product information, see your Upjohn representative or consult the package insert. MED-B-1-S (LWB)

Upjohn
The Upjohn Company, Kalamazoo, Michigan 49001

MICHIGAN
DEPARTMENT
OF PUBLIC
HEALTH

Monthly Surveillance Report

Cases of Certain Diseases Reported
To the Michigan Department of Public Health

For the Four-Week Period Ending October 29, 1971

	1971 This 4-Week Period	1970 Same 4-Week Period	1971 Total To Above Date	1970 Total Same Date	Total Cases for 1970
Rubella	90	79	2,769	2,779	3,012
Congenital Rubella Syndrome	0	0	1	0	2
Measles	82	39	2,427	1,764	1,834
Whooping Cough	22	27	123	180	195
Diphtheria	—	—	—	—	—
Mumps	177	398	9,749	5,457	7,825
Scarlet Fever & Strep Sore Throat	635	686	9,115	9,307	11,863
Tetanus	0	2	2	6	8
Poliomyelitis (paralytic)	0	0	0	1	2
Hepatitis	324	347	4,007	3,822	4,594
Salmonellosis (other than S. typhi)	42	45	570	545	665
Typhoid Fever (S. typhi)	1	1	7	12	14
Shigellosis	38	23	197	174	225
Aseptic Meningitis	45	54	191	263	296
Encephalitis	2	26	93	134	155
Meningococcic Meningitis	3	6	57	61	69
H. Influenza Meningitis	5	2	67	39	61
Tuberculosis	158	146	1,573	1,653	2,006
Syphilis	417	354	3,675	3,150	3,900
Gonorrhea	2,045	1,683	17,914	17,109	20,676

Information can be supplied by the local health department on the local incidence of disease.

Maurice Reizen, M.D., Director
Michigan Department of Public Health

Established 1924

MERCYWOOD HOSPITAL

4038 Jackson Road **Conducted by Sisters of Mercy** **Ann Arbor, Michigan**

Telephone — 313 663-8571

Mercywood Hospital is a private neuropsychiatric hospital licensed by the Michigan Department of Mental Health. Mercywood specializes in intensive, multi-disciplinary treatment for emotional and mental disorders.

Accredited by the Joint Commission on Accreditation of Hospitals and the National League of Nursing. A full Blue Cross participating hospital.

Certified for: Medicare and M.A.A. programs

Robert J. Bahra, M.D.
Dean P. Carron, M.D.
Francis M. Daignault, M.D.
Gordon C. Dieterich, M.D.
James R. Driver, M.D.
Robert L. Fransway, M.D.
Stuart M. Gould, Jr., M.D.
Sydney Joseph, M.D.
Hubert Miller, M.D.
Jacob J. Miller, M.D.
Rudolf E. Nobel, M.D.
Gerard M. Schmit, M.D.
Joseph J. Tiziani, M.D.
Prehlad S. Vachher, M.D.
Richard D. Watkins, M.D.
Robert M. Zimmerman, M.D.

Coming soon...

your new copy of the Proceedings of the 1971 MSMS House of Delegates

and...

your 1972 roster of all MSMS members

Watch for them, and add them to your files!

Horizons Unlimited

Copies of AMA *Horizons Unlimited* career handbook with the Michigan insert about Michigan schools offering health career courses have been distributed by Doctors Rodney J. Rogers and Lloyd E. Appell of Vicksburg to "Candy Stripers" at the local hospital there.

Copies of both are available to MSMS members by writing to MSMS, Box 950, East Lansing, Mi 48823.

Happiness is a regular paycheck.

Hire a Disabled Veteran

THE PRESIDENT'S COMMITTEE ON EMPLOYMENT OF THE HANDICAPPED

In memoriam

Henry Coucke, MD
Southfield

Henry O. Coucke, MD, former Ferndale and Royal Oak surgeon, died Oct. 18 at the age of 64. He was a former Grace Hospital staff member.

A graduate of the Wayne State University School of Medicine, he was a member of the American Society of Abdominal Surgeons, International College of Surgeons and Detroit Surgical Society.

Alexander P. Dukay, MD
Ann Arbor

Alexander P. Dukay, MD, Ann Arbor, former medical superintendent of Ypsilanti State Hospial, died Nov. 5 at the age of 52.

Doctor Dukay was in private practice at the time of his death and was affiliated with Mercywood Hospital in Ann Arbor. He was a member of the American Psychiatric Association, the Michigan Society of Neurology and Psychiatry and the Michigan Society for Mental Health.

He was a graduate of the University of Szeged, Hungary.

George A. Ford, MD
Detroit

George A. Ford, MD, Detroit generalist since 1912, died Oct. 1 at the age of 92.

Doctor Ford was graduated from Detroit Homeopathic College and was affiliated with the Grace Hospital, where he had been chief of staff.

Herbert V. Gerber, MD
Alexandria, Va.

Herbert V. Gerber, MD, former Saginaw physician until joining the Veterans Hospital medical staff in Alexandria, Va., in 1958, died Oct. 13 at the age of 57.

Doctor Gerber was a graduate of the Wayne State University Medical School and had practiced in Saginaw and San Diego, Calif. He was an ophthalmologist and belonged to the National Ophthalmology Society.

James W. Hubly, MD
Pompano Beach, Fla.

James Worden Hubly, MD, former Battle Creek surgeon until retiring to Pompano Beach, Fla., in 1966, died Oct. 17 at the age of 65.

Doctor Hubly helped establish the Calhoun County Cancer Registry, the first in the U.S. He received the American Cancer Society's national award for top volunteer workers in 1964, after serving as the registry's first chairman, a post he held for 14 years.

He was also a founder and first chairman of the Michigan Cancer Coordinating Committee and won the Battle Creek *Enquirer and News* George Award in 1965 for his role in establishing the county registry.

Doctor Hubly was a graduate of the University of Michigan Medical School and had served as chief of surgical service at the Battle Creek Sanitarium and chief of staff at Leila Hospital. He was a president of the North Central Clinical Society, member of the American College of Surgeons, Central Surgical Association and was a diplomate of the American Board of General Surgery.

John W. James, MD
Saginaw

John W. James, MD, Saginaw General practitioner for 40 years, died Oct. 3 at the age of 68.

Doctor James was Saginaw Valley College physician until his retirement in June. He had also served until then as physician for the St. Francis Home for the elderly in Saginaw.

Doctor James was a past president of the Saginaw County Medical Society and was affiliated with St. Mary's (where he was former chief of staff and chief of obstetrics), St. Luke's and Saginaw General hospitals. He was a graduate of the University of Toronto Medical School.

Samuel T. Sandell, MD
Santa Fe, N.M.

The former chief of the Upper Peninsula Tuberculosis Control Center, Samuel T. Sandell, MD, died Sept. 20 at the age of 63. He resided in Santa Fe, N. M., where he retired in November, 1970.

Doctor Sandell also had served as medical director of the Copper Country Tuberculosis Sanatorium in Hancock and as first regional board president for the Upper Peninsula Region of the Michigan TB and Respiratory Disease Association.

A graduate of the University of Minnesota School of Medicine, he trained as a general practitioner. He was a member of the American College of Chest Physicians and the American Trudeau Society.

The following case from the files of the Wayne County Medical Society Perinatal Mortality Committee is presented as an aid in continuing education.

Sprigg **Subber** **Awtubb** **Widder**

codes **hayfeber** **allerdgies** **"flu"**

relieve them all with all-season ISOCLOR®

timesule® tablet liquid

TWO ACTIVE COMPONENTS
give "four season" sufferers dependable relief

Chlorpheniramine Maleate dries runny noses and eyes, quiets sneezing, wheezing, soothes itching and reduces postnasal drip—all with a particularly low index of side effects such as drowsiness.

Pseudoephedrine HCl: decongests throughout *entire* respiratory tract, opening nasal passages, dilating bronchioles, relaxing "tight chest"—as effectively as ephedrine, but with much less CNS or cardiovascular stimulation.

COMPOSITION: Each tablet or 10 cc. (2 teaspoonsful) of liquid contains:

Chlorpheniramine Maleate	4 mg.
Pseudoephedrine HCl	25 mg.

Each Isoclor Timesule contains:

Chlorpheniramine Maleate	10 mg.
Pseudoephedrine HCl	65 mg.

In a special pellet form providing both prompt and sustained effect.

INDICATIONS: For relief of upper respiratory and bronchial congestion associated with: the common cold, hay fever and allergies, sinusitis, influenza, and vasomotor and allergic rhinitis.

CONTRAINDICATIONS: Sensitivity to antihistamines or sympathomimetic agents. Severe hypertension or severe cardiac disease.

PRECAUTIONS: Use with caution in patients with hyperthyroidism. Patients susceptible to the soporific effects of chlorpheniramine should be warned against driving or operating machinery should drowsiness occur.

CAUTION: Federal law prohibits dispensing without prescription.

SUPPLIED: Tablets: Bottles of 100; Liquid: Pints and gallons; Timesules: Bottles of 50, 250, and 1000.

DOSAGE AND ADMINISTRATION:	Tablets	Liquid	Timesule
Adults:	1 q. 3-4 h.	2 tsp. q. 3-4 h.	1 q. 12 h.
Children 6-12 years:		1 tsp. q. 3-4 h.	
40-50 pounds:		¾-1 tsp. q. 3-4 h.	
30-40 pounds:		½-¾ tsp. q. 3-4 h.	
20-30 pounds:		¼-½ tsp. q. 3-4 h.	
15-20 pounds:		⅛-¼ tsp. q. 3-4 h.	

ARNAR-STONE LABORATORIES, INC.
Mount Prospect, Illinois, U.S.A. 60056
Subsidiary of American Hospital Supply Corporation

Classified Advertising

$5.00 per insertion of 50 words or less, with an additional 10 cents per word in excess of 50.

Are you tired of the smog, traffic congestion, sociological problems, crime and other irritations which have become part of today's urban living? Well then DISCOVER WATERTOWN, WISCONSIN. Exchange all the big city unpleasantries for the peaceful environment and easy going pace of a residential city. Watertown, a progressive community is ideally located equi-distant between Milwaukee and Madison in Southeastern Wisconsin's lake district. The community has a trade (and medical practice) area serving 40-50,000 people. Many new schools, parks, trees and recreational opportunities. A stable economy. Our new Community Health Care Center with its beautiful 110-bed general hospital, connecting (but separate) 24-unit Medical-Dental Office Building (choice of suites still avilable), and connecting 130-bed Nursing Home, was completed in the Spring of 1971. WE URGENTLY NEED another Internist, an Otolaryngologist, an Ophthalmologist, Obstetrician-Gynecologist, and Family Practitioners to join existing medical staff. An immediate successful practice assured. Excellent rapport with the University of Wisconsin Medical School at Madison, and the Medical College of Wisconsin (formerly Marquette University School of Medicine) at Milwaukee. Medical Staff leading and supporting recruitment effort. Write or call Dr. Paul Glunz, Watertown Memorial Hospital, Watertown, Wisc. 53094. Telephone (404) 261-4210.

OPPORTUNITY for Internist or Family Physician to take over thirty year old practice in splendid location. Hospital privileges assured. Less than ten minutes drive to three local hospitals. Excellent hospital and office facilities in city of 125,000 population. Will introduce. Retiring. Reply Box #9, 120 W. Saginaw St., East Lansing, Mi 48823.

DIAGNOSTIC RADIOLOGIST, board certified, young, dynamic with good background and 13 years experience interested in a hospital position or group practice in Southern Michigan. Please contact N. Eryilmaz, M.D., 14235 Triskett Road, Apt. 202, Cleveland, Ohio 44111.

GENERAL PRACTITIONER AND SURGEON: Community in southern, central Michigan, light industrial residential resort area has need for doctors. Two doctors recently retired. New modern all accredited hospital with planned expansion. Good hunting, fishing and lake area. Large, new artificial lake now under construction. For additional information call 313-448-2371 or write Paul B. Goode, Administrator, Thorn Hospital, 458 Cross Street, Hudson, Michigan 49247.

PHYSICIAN 60, must curb activities. Seeks opportunity of four or five hours per day. Non-metropolitan area. Will consider institutional work, extra in busy office, student health small college, or non-medical allied field. Experience broad and in-depth. General practice, Emergency room, obstetrics and gynecology (College OB-GYN). Oriented in field psychosomatic medicine. References. Reply Box #7, 120 West Saginaw Street, East Lansing, Michigan 48823.

PSYCHIATRISTS—Ann Arbor Area: Board eligible or board certified to join staff of newly established 50-bed forensic center. Active inpatient and outpatient diagnostic program with court experience. Excellent paramedical staff with opportunity for varied treatment of patients in milieu program, teaching, and research in all areas of forensic psychiatry. Private practice allowed. Salary: $23,531 to $30,735; liberal fringe benefits. Write: Lynn W. Blunt, M.D., Clinical Director, Center for Forensic Psychiatry, Box 2060, Ann Arbor, Michigan 48106. (313) 429-2531.

WINTER-SUMMER VACATIONLAND—Staff Physician or Internist. Interesting and challenging assignment, small progressive, affiliated hospital. Ideal location, easy access to metropolitan area. Competitive salary with increment schedule; leave policy 30 days vacation, 9 holidays, 15 sick days yearly; attractive retirement system credits military service; full scale fringe benefits. Licensure (any state) required. Equal opportunity employer. Call collect E. R. Cleveland, M.D., Chief of Staff, Area 517, 793-2450, Ext. 201, VA Hospital, Saginaw, Michigan.

ANN ARBOR-YPSLANTI AREA: 3 year approved, university affiliated, psychiatric residency at mental health center offering comprehensive services to SE Michigan; teaching faculty and supervisors include University of Michigan faculty, private psychiatrists and analysts as well as hospital staff; resident's time divided approximately equally between didactic seminars (including supervision) and clinical experience; first year ADM and intensive treatment units; second and third year assigned community psychiatry and/or OPC and/or Children's Unit; additional experience in psychosomatic medicine, University Mental Hygiene Clinic and neurology. 3 years: $12,215 to $13,893; 5 years: $13,927 to $18,708 (4th and 5th year salaries negotiable). All Michigan Civil Service benefits. Contact: W. Bogard, M.D., Ypsilanti State Hospital, Ypsilanti, Michigan 48197. An Equal Opportunity Employer.

PSYCHIATRIC RESIDENCY. Three years fully approved program in a large university affiliated general hospital. We provide closely supervised training in dynamic psychiatry, child psychiatry, medicolegal experience, and basic neurology. Salary to $15,000 plus benefits. For further details and consideration submit your resume to: Dr. Robert Schobach, Director of Psychiatric Training, Henry Ford Hospital, 2799 W. Grand Blvd., Detroit, Michigan 48202.

INTERNIST AND GENERAL PRACTITIONER urgently needed. Practice in community of Charlevoix, population 4,000. Modern, fully accredited hospital, 47 beds, CCU-ICU started. Serves population of 16,000. Office available, rent free until established. Nine member Medical Staff actively assisting in recruitment. Ideal area for really living without big city problems. Beyond compare for recreation year around. Two junior colleges close by. Excellent schools. Reply to: Administrator, Charlevoix Hospital, Charlevoix, Michigan 49720.

FOR RENT—ELEUTHERA, BAHAMAS, 4 twin bedroom, 2 bath house on sea completely equipped. Weekly maid. $50 daily for four. $5.00 each extra person. Weekly, monthly and family rates available. Contact Mrs. E. Bertrand, 2 Sunflower Court, Thornhill, Ontario, Canada.

CITY PHYSICIAN: for employment exam center and public health consultation. Attractive to physician who wants activity limited to a standard work week. Contact D. L. Sherman, Personnel Director, City Hall, Dearborn, Michigan 48126 (313) LU 4-1200.

WANTED: Internist, Board Certified or eligible. Present associate retiring Dec. 1. Established active practice, house staff and medical student teaching available if interested. Located in medical arts building adjacent to hospital, Lansing, Michigan. Reply: Box #8, 120 West Saginaw Street, East Lansing, Michigan 48823.

FOR SALE: Medical Equipment suitable for use by internist of F.M.D.: X-Ray, Diathermy, examining tables, treatment tables, instrument and supply cabinets, surgical instruments, cautery, centrifuge, office furniture, steel files and many other items. Will sell at appraised value. Reply Box #10, 120 West Saginaw St., East Lansing, Mi 48823.

GENERAL PRACTITIONERS — Community of Mt. Pleasant, Michigan desirous of securing 4 general practitioners. Good hospital privileges available. 125 bed, fully accredited. Excellent consultants available in community. Mixed M.D., D.O. Staff. Active staff of 28 physicians. Community of 22,000. Site of Central Michigan University. 14,500 students. Four season area. Metropolitan areas within 50 miles. Service area of 75,000. Five G.P.'s in active practice. Community will assist actively in helping you get established. Call collect R. E. Pieratt, Adm. (517) 773-7941 or Frank Johnson, M.D., Chairman Recruitment Committee, area (517) 772-4846.

FOR LEASE: In the Prairie Professional Building, located in the City of Grandville, Michigan. With the construction of phase 3 nearly complete, we have choice suites available. Will be developed to your exact requirements. Suitable for medical, dental or related professions. Also, lower level suite available at reduced rates. Lease rentals include heat, electric, air conditioning, snow removal, paved parking, built-in vacuum system, music, attractive landscaping. This location is convenient and desirable. Reply to Prairie St. Realty Corp., 2700 28th St., S.W., Grand Rapids, Michigan or phone (616) 538-9000 days or evenings (616) 457-9645.

HOSPITAL-MEDICAL PLANNING, INC.
Alco Universal Building
East Lansing, Michigan
48823
517 332-1333

PROFESSIONAL PERSONNEL RECRUITMENT
FOR
HOSPITALS CLINICS UNIVERSITIES
Administrators, Physicians, Dept. Heads

ATTENTION: MEDICAL GROUPS

We welcome inquiries from all Medical Groups in Michigan who need additional physicians. Our specialized recruitment program regularly turns up men interested in a good situation in the Great Lakes States or another part of the country. By presenting a variety of opportunities in Michigan to these men, we can assist in meeting Michigan's needs. We work with only the best men. Write or call Arthur A. Lepinot.

WANTED: MEDICAL DIRECTOR

Resumes are welcome from physicians of all specialties. There is no financial obligation to the individual physician. We are searching for men in all specialties for excellent appointments available in Groups, Clinics, Hospitals, and Universities in the Great Lakes Region. We are now looking for a Medical Director for a hospital and also for a large steel company employing 11,000 people. An excellent position. Send your resume or call Arthur A. Lepinot.

Index to Advertisers

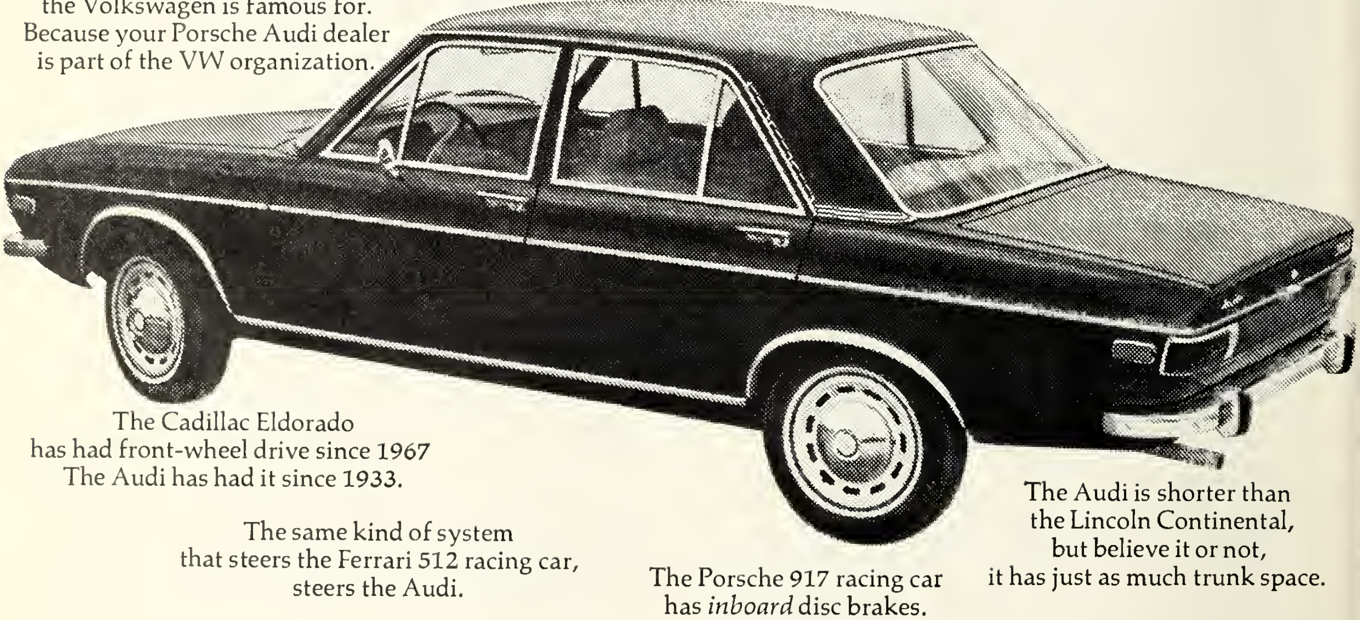
Arch Laboratories	1153
Arnar Stone	1171
Brown Pharmaceuticals	1151
Campbell Soup Co.	1129
Classified Advertising	1172, 1173
Dorsey	1161
Fisher Building	1141
Flint Labs	1156, 1157, 1158, 1159
Geigy Pharmaceuticals	1098
Hospital Planning, Inc.	1173
Import Motors Limited, Inc.	1174
Lilly, Eli and Co.	1106, 1132
Mead-Johnson	1134, 1135
Medical Protective Co.	1151
Mercywood Hospital	1168
Poythress, Wm. P. & Co.	1101
Roche Laboratories	1097, Cover II, Cover IV
Schering Corp.	1137
Searle, G. D. & Co.	1130, 1131
Smith, Kline & French	1162
Stratton, Ben P. Agency	Cover III
Stuart Pharmaceuticals	1138, 1139
Upjohn	1142, 1143, 1144, 1164, 1165, 1166, 1167
Walker Corp. & Co.	1102, 1147
Wallace	1149

TEST DRIVE
7 CARS

You can hardly
spot the difference between
the interior of the Audi
and that of the Mercedes-Benz 280SE.

The Audi gets
the same kind of expert service
the Volkswagen is famous for.
Because your Porsche Audi dealer
is part of the VW organization.

The Audi has the same
headroom and legroom as the Rolls-Royce Silver Shadow.



The Cadillac Eldorado
has had front-wheel drive since 1967
The Audi has had it since 1933.

The same kind of system
that steers the Ferrari 512 racing car,
steers the Audi.

The Porsche 917 racing car
has *inboard* disc brakes.
So does the Audi.

The Audi is shorter than
the Lincoln Continental,
but believe it or not,
it has just as much trunk space.

The Audi 100LS

PORSCHE | AUDI
a division of Volkswagen

Camp's Cars, Inc.
2000 S. Saginaw Rd., Midland

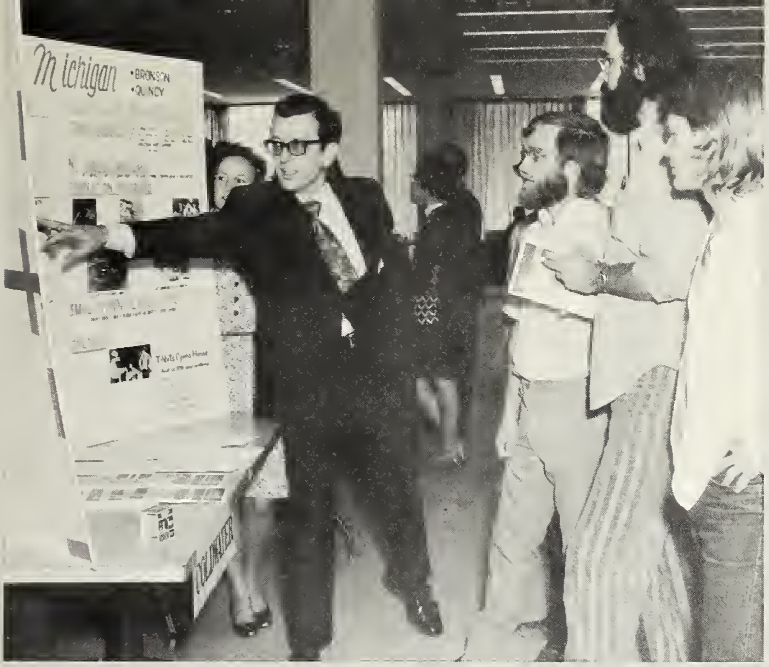
Wood Imports, Inc.
15415 Gratiot Ave., Detroit

Prestige Porsche Audi, Inc.
2955 S. Division Ave., Grand Rapids

Williams Porsche Audi
2924 E. Grand River Ave., Lansing

Traverse Motors, Inc.
1301 Garfield Ave., Traverse City

Tom Sullivan Porsche Audi Co.
499 S. Hunter Blvd., Birmingham



Community-medical student day a great success

"Small town peace and quiet" is an advantage of the Coldwater area, advertises John J. Rick, MD, local cardiologist, as he talks to medical students he hopes to attract to his home town. Coldwater was one of 30 communities seeking future doctors who set up displays at the "Michigan Community-Medical Student Day" late in October at Wayne State University's new basic science building, Scott Hall in the Detroit Medical Center.

Key figures at the community-student day, cosponsored by the Michigan Health Council and Wayne State University School of Medicine are, from left, Sol Edelstein and Douglas Jackson, originators of the WSU student project whereby Michigan communities finance a medical student's education in return for his agreement to practice in that community after graduation; Brooker L. Masters, MD, MSMS Council chairman and John A. Doherty, executive vice president, Michigan Health Council. Mr. Jackson and Mr. Doherty were co-chairmen of the October event.

Over 300 medical students from Wayne State University, the University of Michigan and Michigan State University visited the booths of Michigan communities seeking doctors during the community-student day, the first such event in the nation. Since its success, surrounding states have indicated an interest in staging similar affairs.

MSU dedicates Life Sciences I

State, federal and civic leaders turned out to make speeches and cut a ribbon to open Michigan State University's new Life Sciences I building. Taking their turn at one of the ribbons are (from left): John Barson, DO, associate dean, College of Osteopathic Medicine; Richard U. Byerrum, PhD, dean, College of Natural Science; Isabelle K. Payne, PhD, director, School of Nursing; Robert D. Schuetz, PhD, acting director, Institute of Biology and Medicine; Willis W. Armistead, DVM, dean, College of Veterinary Medicine; Andrew D. Hunt, Jr., MD, dean, College of Human Medicine.

At the informal reception following the dedication, Donald H. Kuiper, MD, left, assistant professor of medicine at the College of Human Medicine, talks with Warren M. Huff, member of the MSU Board of Trustees.

The audience at the dedication heard from Doctor Hunt, left, dean of the College of Human Medicine, and Russell G. Mawby, president of the W. K. Kellogg Foundation, which helped fund the Life Sciences building. Another speaker was Kenneth M. Endicott, MD, Director, Bureau of Health Manpower Education, National Institutes of Health.

Self-instruction units for medical students in the new building include 40 carrels containing audio tape decks, film and slide projectors, and, in some, color television. William T. Allen, first-year student in the College of Human Medicine, studies in his carrel.

A small congregation of first-year human medicine students meets outside the Life Sciences main entrance. From left are Dennis Jewett, class president from Lansing; Howard Brody, East Lansing; Vance Miller, St. Joseph; Cyrys Walker, New York City; Kathleen Andries, Southfield, and Jorge Garcia, Lansing. The $9.6 million structure represents the start of a planned health sciences complex providing joint facilities for the College of Human Medicine, College of Osteopathic Medicine, College of Veterinary Medicine, the School of Nursing and other health sciences programs.

Medical illustrator Doris M. Saenz puts finishing touches on a drawing in the medical media center, part of the Office of Interdepartmental Curriculum in the College of Human Medicine. The center produces many of the teaching slides and films used by medical and nursing students in self-instruction carrels.

DNA repair is part of the research work conducted in the new Life Sciences Building by James E. Trosko, PhD, associate professor of human development. Doctor Trosko, with technician Kathy Wilder, is developing tissue culture techniques for the study of mutations in humans. His laboratory also serves the MSU Genetics Counseling Center.

A Hodgkin's disease patient, Gary Gallagher, second from left, pleaded with over 500 professional medical personnel to "help terminal patients live their last days with dignity. What we need is help in developing a style of living," he said as he spoke at the Michigan Cancer Foundation's recent symposium on "approaching death." He conferred before the meeting with other panelists and left, Louis R. Zako, MD, MSMS Councilor and trustee of the Downriver Michigan Cancer Foundation Unit.

Panelists for the symposium at Ford Motor Company auditorium included, from left, Melvin J. Krant, MD, associate staff physician, Department of Psychiatry, Tufts University School of Medicine; Beatrice Kastenbaum, RN, director of the MCF Home Assistance Program, and Robert Kastenbaum, MD, director of the Center for Psychological Studies of Dying, Death and Lethal Behaviors, WSU. David Watson, right, is president of the MCF Downriver Unit, Detroit.

Doctor Krant, right, has studied the American approach to death for seven years. He talked during the symposium, the first in a series planned by the MCF, with Michael J. Brennan, MD, MCF president.

Michigan Medicine

Breaking News: Deadline, Dec. 2
December 1971, Volume 70, Number 31
Michigan State Medical Society

Revised Medical Practice Act introduced in Michigan House

A revised Michigan Medical Practice Act, which would modernize and restructure the current act, and would make several major changes in policy and procedures has been introduced in the Michigan House of Representatives. Forty-seven members of the House cosponsored the bill.

Chief sponsor is Rep. Mrs. Josephine Hunsinger, Detroit Democrat and chairman of the House Committee on State Affairs, which will consider the bill. First Republican sponsor is Rep. Peter Kok, Grand Rapids.

In addition to rewriting and modernizing both the language and the structure of the licensing law, HB5767 also:

1—Would establish a five-member advisory committee to the Board of Registration to receive and investigate complaints, and make recommendations thereon to the Board.

2—Would provide for a Limited License to practice medicine. Such limitations would be prescribed by the Board for each individual action.

3—Would permit the Board to take court action in its own name.

4—Would provide for Physician's Assistants, certified and regulated by the Board of Registration in Medicine.

Legislative action is unlikely this calendar year.

County societies still replying to MSMS drug abuse survey

About four-fifths of MSMS's 55 component county medical societies have responded to a questionnaire on drug abuse distributed by the MSMS Committee on Alcohol and Drug Dependence.

Detailed information on the drug education activities of those county societies will be published in the January issue of *Michigan Medicine*. The county societies have been asked to describe community action they have initiated in the battle against drug abuse.

Blue Shield still holding to wage freeze of physician payments

At the deadline for this issue, Michigan Blue Shield was holding firm to its commitment to continue its present policy of no increases in prevailing screens or individual physician

CAPSULES

James Acocks, MD, medical director of the Morgan Heights State Sanatorium, Marquette, recently completed his 25th year in that position. The sanatorium recently marked its 60th anniversary.

* * *

A new orthopedic center for the education of physically handicapped children in Bay City is named for George M. Brown, MD, who has worked with crippled children in the area since 1922. The new center is the fulfillment of Doctor Brown's own dream. He is president of the Bay County chapter, Michigan Society for Crippled Children and Adults, and is past president of the Bay County Medical Society.

* * *

Louis E. Heideman, MD, Detroit, is new chairman of the pediatrics department at Detroit General Hospital. He succeeds Marilyn Heins, MD. Doctor Heideman has also been elevated to professor of pediatrics at the Wayne State University School of Medicine.

A new maternal health desk reference card on "The High Risk Fetus" will be published in the January issue of Michigan Medicine. *Be sure to add it to your file.*

Brochures and other publications presenting the facts about the sudden infant death syndrome are available to Michigan physicians from the Michigan Chapter of the National Foundation of Sudden Infant Deaths, Inc., P.O. Box 223, Livonia, Mich. 48151. The NFSID is an organization of physicians, researchers, concerned parents and professional agencies.

* * *

The Michigan State University Family Practice Club set an attendance record at its fall meeting, with a total of 172 persons present, including 22 physicians. The topic was "The Seductive Patient." Panel members were James F. Dooley, MD, Flint; Arnold Werner, MD, East Lansing, and Hugo Saenz, MD, Lansing.

* * *

The Michigan Diabetes Association estimates that it tested over 30,000 Michigan citizens for "hidden" diabetes during Diabetes Week Nov. 14-20.

The exact number tested and the number of "hidden" diabetics found will be announced in coming weeks by the diabetes association. Tests were conducted at 84 locations during the special week.

* * *

Michigan Blue Cross-Blue Shield is still shooting for a Jan. 1 changeover date in the takeover of the Detroit-area Community Health Association. Administrative details are now being worked out, following approval of the merger Nov. 6 by the CHA delegates. According to Louis A. Hayes, MD, senior vice president of the Medical Affairs Division of Blue Shield, the Michigan insurance commissioner has voiced no objections to the change.

customary charge profiles, according to the President's wage and price freeze.

"To date, we have not received any indication from any official source indicating that the 'freeze' on prices (fees) is to be lifted," said Blue Shield in a Nov. 12 letter to all Michigan doctors. "When such price restrictions have been lifted, we will advise you together with any specific guidelines or other clarification that may apply."

MSMS VD education effort bringing big response

Requests from youth-serving health centers and agencies are pouring into MSMS for educational information on venereal disease. The requests have come in response to a special Venereal Disease Control Project sponsored by MSMS in cooperation with the Michigan Department of Public Health.

More than 30,000 copies of an AMA educational leaflet, "VD's Dubious Distinction," have been asked for. Copies of the leaflet as well as reprints of the special section on venereal disease from the November issue of *Michigan Medicine* will be sent to any physician on request.

Special materials also have been made available to medical staffs of hospitals in the 12 Michigan counties with the highest gonorrhea rates.

Health Council has new leaders

William Hennessy, RPh, Grosse Pointe, will lead the Michigan Health Council during 1972. He became the 19th president of the MHC Council at its annual meeting early in November. Mr. Hennessy is a past president of the Michigan and the American Pharmaceutical Associations.

Elected along with Mr. Hennessy were Robert E. Rice, MD, Greenville, president-elect; Harry A. Towsley, MD, Ann Arbor, president emeritus; Hugh W. Brenneman, East Lansing, secretary; John C. McCabe, Detroit, treasurer; Lionel F. Swan, MD, Detroit, medical advisor; Marvin L. Niehuss, LLB, Ann Arbor, legal counsel and John A. Doherty, executive vice president.

Re-elected to three-year terms on the MHC board of trustees were Richard U. Byerrum, PhD, East Lansing; Sidney E. Chapin, MD, Dearborn; Herbert Estes, Ann Arbor; William Hennessy, RPh; Duane Block, MD, Detroit; Andrew Pattullo, Battle Creek; and S. D. Steiner, MD, Detroit.

Special distinguished service awards were voted MHC trustees and past presidents Otto K. Engelke, MD, Ann Arbor; J. K. Altland, MD, Lansing; Herbert Estes; Andrew Pattullo; and Marvin L. Niehuss, Ann Arbor. All of these men have served for over 20 years in a leadership role with the Michigan Health Council. A special tribute to the late Gordon H. Scott, MD, also was given. Dr. Scott was president of

MHC in 1963 and served on the Board of Trustees for many years while Vice President for Medical Affairs and Dean of Medicine of Wayne State University.

Special recognition also was given to Mount Carmel Mercy Hospital and Medical Center in Detroit for their cooperation during the past year with the Michigan Health Council's Summer Exploratory Experience Program in Health Occupations. The hospital took 32 students this summer and provided clinical experiences for the students for a six-week period.

Media awards were voted Jean Pearson of the *Detroit News* and WWTV, Cadillac-Sault Ste. Marie.

Please note addition to 1970 Substitute for Resolutions 10, 46, 47, 70 & 90

MSMS members—and especially members of the House of Delegates—are urged to clip the following correction to the Proceedings of the 1970 House of Delegates and to insert it on page 47 of the Proceedings. The printed Proceedings was mailed to every member of MSMS in December, 1970. The Substitute Resolution as presented originally is printed below, followed by the action of the delegates authorizing a dues increase.

- RESOLUTION 10

Establishment of Counselling Service—
Medical Socio-Economics
John T. Geneczko, MD, Bay-Arenac-Iosco County

HOUSE ACTION: Following Substitute Resolution Adopted in Lieu of Resolutions 10, 46, 47, 70 & 90

Whereas, there is increasing pressure for national health insurance, and

Whereas, the medical profession is unprepared to present realistic programs, and fee schedules to governmental administrators, and recognizing the urgency for the necessity of such preparedness; therefore be it

RESOLVED: That this House of Delegates instruct The Council to set up a Bureau of Economic Information forthwith, and be it further

RESOLVED: That such a Bureau be a single department devoid of other administrative duties, and be it further

RESOLVED: That the head of said Bureau be a person with sufficient experience and knowledge to accomplish the following aims:

1. To develop and analyze statistical data on a local and statewide basis pertaining to the economics of medical care.
2. To compare such data with material now furnished by governmental and other sources.
3. To make such data available to the state and component medical societies and their members as desired.
4. Such other activities as may be designated by The Council or the House of Delegates.

THE REFERENCE COMMITTEE on Ways and Means, John W. Moses, MD, Chairman, presented the following recommendation:

> **"Your committee, therefore, recommends a dues increase of $10.00 per annum per dues-paying member, such funds to be specifically designated for the purpose of initiating and implementing a Bureau of Economic Information."**

THE HOUSE approved the recommendation of the Reference Committee.

CAPSULES/Continued

Leaving Michigan is Ralph Daniel, head of Michigan's alcoholism education program for 18 years and an adviser many times to MSMS committees. He will be assistant commissioner of health for addictive behavior with the Arizona Health Department.

* * *

The Michigan Employment Security Commission, 7310 Woodward, Detroit, has been designated as the coordinator of the Military Experience Directed Into Health Careers (MEDIHC) program. MEDIHC promotes the employment of veterans in the health careers and publishes a newsletter called MEDIHC Profiles listing the names of veterans and health positions wanted.

* * *

Five Michigan physicians are new officers of the board of the American College of Emergency Physicians. They are John G. Wiegenstein, MD, Lansing, member of the executive committee; and directors Eugene C. Nakfoor, MD, Lansing; John T. Rogers, MD, Orchard Lake; John A. Rupke, MD, Grand Rapids, and John H. van de Leuv, MD, Oxford. New president of the ACEP is James D. Mills, MD, Alexandria, Va.

* * *

Michigan State University is beginning the second phase of a study to decide whether to initiate a prepaid health care plan for all members of the university community. Students, faculty, other employees and their families would be included if the second phase, expected to take one year, supports the establishment of such a program. Phase II of the study is being conducted by the Office of Health Services Education and Research, a division of the College of Human Medicine.

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

IGRAMS
NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 6 1972

ichigan Medicine
December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to
st possible changes in Draft #6 of the proposed articles of in-
ed MSMS foundation. A previous
f the House, which asked for
n Utilization Review and Health
he MSMS Council on Nov. 10 made
ry delegate Dec. 13 for his
nent society presidents and
SMS Council, after reviewing
l submit another proposal to
tes March 20-21.

omotional mailings about a group tour that
MS legal counsel has advised that Medi-
any connection with the agency. Physicians
estions, thus calling attention to the con-
s, 1081 Arlington, Ann Arbor, is promoting
, Michigan Medical Society" without any

the physicians' rate increase
by the federal Price Commission
office, contacted Dec. 16 by
tation before responding. The
wages and not prices and there-
ather than the Price Commission.
aid objectives of the ruling,
dustries Cost Board, is to re-
es by half.

ians to send their $5.00 re-registration
State Board of Registration in Medicine,

ces appropriation bill in its
package for Social Services re-
000 for physician fees for
es.

HEALTH BOARD BILLS have passed the Legis-
illiken for signature. Last medical-
1971 session was SB134, introduced at the
n Zaagman (Grand Rapids). The bill re-
county board of health to be an MD or DO.
ty boards of health do NOT have medical
e Governor is expected to sign all three

MSMS at work...
...serving doctors, public in many ways

The Michigan State Medical Society has a proud heritage of serving the doctors of medicine as their professional society and serving the public also in many, many ways.

This publication describes the many membership services to Michigan doctors of medicine; and focuses on current activities to provide leadership in a changing setting.

Michigan State Medical Society
120 West Saginaw
East Lansing, Michigan 48823

1182-1

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

Table of Contents

3 Introduction

4 House of Delegates And MSMS Council

5 Headquarters Staff

7 Department of Operations and Economi And Bureau of Economic Information

8 Department of Government Relations

9 Office of Governmental Medical Care Programs

11 MSMS Legal Counsel

12 Postgraduate Medical Education

13 Department of Communications And Professional Information

15 Component Medical Societies And Specialty Groups

16 Member Insurance Services

17 Liaison with Medical Students And SAMA Chapters

18 MSMS History

Specific questions about MSMS member benefit or services to the public may be addressed to Warren F. Tryloff, Director, Michigan State Medical Society, 120 West Saginaw, East Lansing, MI 48823

Published by the MSMS Department of Communications and Professional Information, 197

IIGRAMS
NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 6 1972

ichigan Medicine
December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to
est possible changes in Draft #6 of the proposed articles of in-
ed MSMS foundation. A previous
f the House, which asked for
n Utilization Review and Health
he MSMS Council on Nov. 10 made
ry delegate Dec. 13 for his
nent society presidents and
SMS Council, after reviewing
l submit another proposal to
tes March 20-21.

omotional mailings about a group tour that
MS legal counsel has advised that Medi-
any connection with the agency. Physicians
estions, thus calling attention to the con-
s, 1081 Arlington, Ann Arbor, is promoting
, Michigan Medical Society" without any

the physicians' rate increase
by the federal Price Commission
office, contacted Dec. 16 by
tation before responding. The
wages and not prices and there-
ather than the Price Commission.
aid objectives of the ruling,
dustries Cost Board, is to re-
es by half.

ians to send their $5.00 re-registration
State Board of Registration in Medicine,

ces appropriation bill in its
package for Social Services re-
000 for physician fees for
es.

HEALTH BOARD BILLS have passed the Legis-
illiken for signature. Last medical-
1971 session was SB134, introduced at the
n Zaagman (Grand Rapids). The bill re-
county board of health to be an MD or DO.
ty boards of health do NOT have medical
e Governor is expected to sign all three

MSMS at work . . .
. . . serving doctors, public in many ways

The Michigan State Medical Society serves some 8,000 doctors and the people of Michigan.

The Society conducts programs to advance the professional and economic affairs of its members and to provide specific personal services.

A House of Delegates, the governing body, represents the component societies of MSMS and decides policy positions.

Interaction with all phases of the medical profession is maintained through 80 permanent and ad hoc committees. A 10-member judicial commission, elected by MSMS membership, oversees ethical principles within the society.

MSMS programs include post-graduate medical education, legislative relations, socio-economics, etc.

Members receive a monthly journal, *Michigan Medicine,* and other pertinent publications.

The MSMS headquarters in East Lansing is a distinctive building designed by noted Michigan architect, Minoru Yamasaki.

The decisions of MSMS—the one organization representing the state's entire medical profession—influence the entire medical and health industry.

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

MSMS at work . . .

. . . developing policies on medicine and health

The procedure by which every MSMS member can participate in MSMS policy decisions has been refined over 106 years. It works like this:

1. Each MSMS member has a voice in establishing the policies of the State Medical Society, through the democratic process set up by the Society.

2. Each MSMS member elects delegates to the MSMS House of Delegates. Each member may ask his delegates to introduce a resolution before the House.

3. Delegates are elected by the 55 component county medical societies. Specialty sections and Student American Medical Association chapters at the three state medical schools are also represented.

4. Resolutions are submitted in writing to the House. Each is turned over to an appropriate reference committee, which holds open hearings at which any interested MSMS member may testify. Some resolutions are concentrated within the profession, but many concern both doctors and public. One resolution, for example, instructed a committee to investigate new incentives for attracting physicians to areas of acute need. Another offered the help of MSMS in programs of drug education.

5. After the hearings, the committee recommends approval, disapproval, or develops

DIGRAMS

NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY

JAN 6 1972

ichigan Medicine

December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to
est possible changes in Draft #6 of the proposed articles of in-
ed MSMS foundation. A previous
f the House, which asked for
n Utilization Review and Health
ne MSMS Council on Nov. 10 made
ry delegate Dec. 13 for his
nent society presidents and
SMS Council, after reviewing
l submit another proposal to
tes March 20-21.

omotional mailings about a group tour that
MS legal counsel has advised that Medi-
any connection with the agency. Physicians
estions, thus calling attention to the con-
s, 1081 Arlington, Ann Arbor, is promoting
, Michigan Medical Society" without any

the physicians' rate increase
by the federal Price Commission
office, contacted Dec. 16 by
tation before responding. The
wages and not prices and there-
ather than the Price Commission.
aid objectives of the ruling,
dustries Cost Board, is to re-
es by half.

ians to send their $5.00 re-registration
State Board of Registration in Medicine,

ces appropriation bill in its
package for Social Services re-
000 for physician fees for
es.

HEALTH BOARD BILLS have passed the Legis-
illiken for signature. Last medical-
1971 session was SB134, introduced at the
n Zaagman (Grand Rapids). The bill re-
county board of health to be an MD or DO.
ty boards of health do NOT have medical
e Governor is expected to sign all three

---

an amendment to the resolution. The report then goes to the House for action.

6. The members of the House act on the reports of each reference committee. Many points of view are presented. Sometimes a special committee is established to study the matter further and report alternatives to the next session.

7. The MSMS Council, which serves as a board of directors and meets regularly between annual sessions, is responsible for implementation of resolutions. The Council also introduces resolutions through the immediate past president. Such resolutions receive the same procedure as those submitted by individual delegates.

8. Each adopted resolution is assigned to the appropriate MSMS committees for implementation. The Speaker and The Council chairman submit a written report of the follow-through on each resolution.

MSMS at work . . .
. . . through its fine headquarters staff

The staff structure of MSMS was streamlined in 1970 after a major management study—and operates efficiently today through three departments and several adjunct units.

Warren Tryloff, who has been with MSMS for 16 years in various administrative capac-

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

ities, is the director, responsible for the operation of the staff and headquarters.

The Department of Government Relations is crucial to the interests of the physician. One staff member acts as a liaison for physicians on state and federal legislative matters. A governmental relations specialist works with state and national agencies to interpret the impact of their activities on the Michigan doctor. A third staff member keeps MSMS active in political events.

The Department of Communications and Professional Information informs members of Society activities, and tells the public the doctors' side of the (often controversial) issue. News releases, a weekly radio program, meetings with various media people—all are tools used to voice the concerns of the medical profession. *Michigan Medicine* and the twice-monthly *Medigram* keep doctors posted and keep the managing editor busy.

The Department of Operations and Economics supervises the work of the new Bureau of Economic Information, coordinates the House of Delegates sessions, and oversees the daily operation of the building and several service departments.

The scientific coordinator handles the Annual Scientific Session, the MSMS continuing medical education programs and various workshops, and assists the many scientific committees.

A controller is in charge of accounting, maintains membership records and handles business operations.

Altogether a staff of 20 full-time personnel serves the needs of MSMS members in an efficient and courteous manner.

DIGRAMS
NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 6 1972

ichigan Medicine
December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to
est possible changes in Draft #6 of the proposed articles of in-
ed MSMS foundation. A previous
f the House, which asked for
n Utilization Review and Health
he MSMS Council on Nov. 10 made
ry delegate Dec. 13 for his
nent society presidents and
SMS Council, after reviewing
l submit another proposal to
tes March 20-21.

omotional mailings about a group tour that
MS legal counsel has advised that Medi-
any connection with the agency. Physicians
estions, thus calling attention to the con-
s, 1081 Arlington, Ann Arbor, is promoting
, Michigan Medical Society" without any

the physicians' rate increase
by the federal Price Commission
office, contacted Dec. 16 by
tation before responding. The
wages and not prices and there-
ather than the Price Commission.
aid objectives of the ruling,
dustries Cost Board, is to re-
es by half.

ians to send their $5.00 re-registration
State Board of Registration in Medicine,

ces appropriation bill in its
package for Social Services re-
000 for physician fees for
es.

HEALTH BOARD BILLS have passed the Legis-
illiken for signature. Last medical-
1971 session was SB134, introduced at the
n Zaagman (Grand Rapids). The bill re-
county board of health to be an MD or DO.
ty boards of health do NOT have medical
e Governor is expected to sign all three

MSMS at work . . .

. . . obtaining economic information for doctors

The newest staff unit of MSMS is the Bureau of Economic Information within the Department of Operations and Economics. Established by a resolution of the 1970 Annual Session, its immediate goal is to gather information in response to increasing need for facts.

Currently, two research projects are being conducted. A survey on overhead costs of medical practice, mailed to all members of MSMS, is now being correlated by computer and key-punch techniques. An unusually good response of almost 20% indicates that Michigan doctors are vitally interested in this economic area.

A second, related project is being carried out. Doctors have been asked to fill out a fee survey, according to specialty areas, and response is over 30%.

Resultant data from these and other projects will be made available to MSMS members and component medical societies, and will be utilized in MSMS legislative and socio-economic efforts.

Also underway is a probe of the values that doctors place on various medical procedures in the fields of medicine, surgery, pathology, and radiology. Section chairmen and specialty society leaders are assisting the Relative Value Study Committee.

Three physicians serve as advisors to the Bureau: the chairman of the Medical Socio-Economics Committee; the chairman of the Planning & Priorities Committee, and the chairman of the Committee on Governmental Medical Care Programs.

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

MSMS at work . . .

. . . studying, influencing medical care legislation

Efforts of the MSMS to protect and improve medical care in Michigan are as old as the Society itself. Starting immediately after the Civil War, members worked for three years to convince the Legislature to establish a State Board of Health.

Today the Society works through a full-time staff person and the Legal Affairs and other committees to keep informed about state legislation which can affect the medical profession.

The MSMS legislative efforts are based on resolutions adopted by the House of Delegates, directions from The Council, and committee advice. MSMS provides expert testimony before various legislative committees on many medical issues.

Besides maintaining daily contact with the legislature, the Department of Government Relations provides staff and counsel for three exciting new programs:

Volunteer Lobbying Program utilizes the talents of individual physicians in lobbying efforts. The physician arrives at the MSMS offices for a briefing on pending legislation. He spends the rest of the week at the Capitol. Reaction is excellent from both doctors and legislators, and other states are following Michigan's lead in this innovation.

"Key Man" Program enlists doctors in the legislators' constituencies to establish con-

DIGRAMS
NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 6 1972

ichigan Medicine

December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to
est possible changes in Draft #6 of the proposed articles of in-
ed MSMS foundation. A previous
f the House, which asked for
n Utilization Review and Health
ne MSMS Council on Nov. 10 made
ry delegate Dec. 13 for his
nent society presidents and
SMS Council, after reviewing
l submit another proposal to
tes March 20-21.

omotional mailings about a group tour that
MS legal counsel has advised that Medi-
any connection with the agency. Physicians
estions, thus calling attention to the con-
s, 1081 Arlington, Ann Arbor, is promoting
, Michigan Medical Society" without any

the physicians' rate increase
by the federal Price Commission
office, contacted Dec. 16 by
tation before responding. The
wages and not prices and there-
ather than the Price Commission.
aid objectives of the ruling,
dustries Cost Board, is to re-
es by half.

ians to send their $5.00 re-registration
State Board of Registration in Medicine,

ces appropriation bill in its
package for Social Services re-
000 for physician fees for
es.

HEALTH BOARD BILLS have passed the Legis-
illiken for signature. Last medical-
1971 session was SB134, introduced at the
n Zaagman (Grand Rapids). The bill re-
county board of health to be an MD or DO.
ty boards of health do NOT have medical
e Governor is expected to sign all three

---

tinuing contact with their legislators and talk with them about medical legislation. This program is in its initial stages.

MDPAC (Michigan Doctors Political Action Committee) is a separate voluntary nonprofit group of physicians, their wives and other interested persons. MDPAC's primary function is to support political candidates in behalf of organized medicine. In addition, it works to keep doctors informed of medical-political issues and gives them an avenue for concerted political action. MDPAC offers voting records and other information to members, studies candidates on the basis of those who support or will support medicine's position. It coordinates its efforts with other groups engaged in working for better government. It is guided by a 30-member board of directors.

MSMS at work . . .
. . . with state and federal agencies

It is only through organized medical groups that physicians can present a united front to legislative and governmental questions. Every Michigan doctor is affected by MSMS efforts to understand and shape government programs, regulations, and proposals.

A specialist on government medical care programs, as a member of the MSMS Department of Government Relations, is alert

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

---

to the numerous proposed and operative government-funded programs which provide medical care to citizens. He keeps himself informed through government and private publications, personal contact with a wide number of state agencies, and appropriate regional, state, and national meetings. He handles increasing correspondence and phone calls, drawing upon an extensive background in federal, state and county government.

This office provides information to The Council via the 12-member Government Medical Care Committee and other related committees. Important liaison is maintained with the Michigan State Pharmaceutical Association, the State Board of Registration in Medicine, the Michigan Chapter of Health Insurance Council, and the State Bar of Michigan.

Information is provided the MSMS membership through a monthly *Michigan Medicine* column.

The MSMS staff provides a volume of constantly changing information about government which could have profound effects on the physician's practice.

IGRAMS
NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 6 1972

ichigan Medicine
December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to
est possible changes in Draft #6 of the proposed articles of in-
ed MSMS foundation. A previous
f the House, which asked for
n Utilization Review and Health
he MSMS Council on Nov. 10 made
ry delegate Dec. 13 for his
nent society presidents and
SMS Council, after reviewing
l submit another proposal to
tes March 20-21.

omotional mailings about a group tour that
MS legal counsel has advised that Medi-
any connection with the agency. Physicians
estions, thus calling attention to the con-
s, 1081 Arlington, Ann Arbor, is promoting
, Michigan Medical Society" without any

the physicians' rate increase
by the federal Price Commission
office, contacted Dec. 16 by
tation before responding. The
wages and not prices and there-
ather than the Price Commission.
aid objectives of the ruling,
dustries Cost Board, is to re-
es by half.

ians to send their $5.00 re-registration
State Board of Registration in Medicine,

ces appropriation bill in its
package for Social Services re-
000 for physician fees for
es.

HEALTH BOARD BILLS have passed the Legis-
illiken for signature. Last medical-
1971 session was SB134, introduced at the
n Zaagman (Grand Rapids). The bill re-
county board of health to be an MD or DO.
ty boards of health do NOT have medical
e Governor is expected to sign all three

MSMS at work . . .

. . . with legal opinions for medicine

MSMS seeks to legally protect and advance the medical profession through a powerful trio: the staff-manned Department of Government Relations, the physician-oriented Legal Affairs Committee, and a legal counsel.

Together they cover the broad area of evaluating and suggesting state legislation, and protecting the professional welfare of physician members.

The legal counsel and the legislative affairs manager work in concert to check through the hundreds of prospective statutes submitted each year to the Michigan legislature. Bills that need the professional expertise of legal counsel are sent to his Detroit office where he may analyze and/or write possible amendments as needed, in cooperation with MSMS staff members.

The counsel receives a large number of queries for legal advice from individual members and component societies, and from hospital administrators. After researching previous court decisions, or studying the request, he answers each letter, with a carbon that goes into the files at MSMS. Thus, an extensive law-oriented view of medical problems over the past 20 years has been collected through this MSMS service.

Counsel points out that the most prolific inquiry sources are the MSMS Legal Affairs

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

Committee, whose meetings he attends, and the doctors and hospital administrators in the smaller communities. However, he is available to answer as many inquiries as possible from physician members and societies.

Queries cover every conceivable health topic: emergency room procedures, physician assistant problems, drug clinics, component society bylaws problems, etc.

MSMS at work . . .

. . . providing postgraduate medical education

MSMS offers postgraduate medical education opportunities to members through a series of projects reaching every Michigan doctor.

The fall Scientific Session, held annually for more than a century, features a two-day series of lectures, panels and demonstrations to cover the interests of every medical specialty. The selection of speakers and pertinent topics begins one year before the scheduled dates. Work is coordinated by both physician members and staff personnel through the MSMS Division of Scientific Affairs.

The monthly MSMS journal, *Michigan Medicine*, includes a wide selection of carefully chosen scientific articles selected by a physician-scientific editor. It also carries short articles about MSMS activities and projects.

IGRAMS

NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 6 1972

ichigan Medicine

December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to
est possible changes in Draft #6 of the proposed articles of in-
ed MSMS foundation. A previous
f the House, which asked for
n Utilization Review and Health
he MSMS Council on Nov. 10 made
ry delegate Dec. 13 for his
nent society presidents and
SMS Council, after reviewing
l submit another proposal to
tes March 20-21.

omotional mailings about a group tour that
MS legal counsel has advised that Medi-
any connection with the agency. Physicians
estions, thus calling attention to the con-
s, 1081 Arlington, Ann Arbor, is promoting
, Michigan Medical Society" without any

the physicians' rate increase
by the federal Price Commission
office, contacted Dec. 16 by
tation before responding. The
wages and not prices and there-
ather than the Price Commission.
aid objectives of the ruling,
dustries Cost Board, is to re-
es by half.

ians to send their $5.00 re-registration
State Board of Registration in Medicine,

ces appropriation bill in its
package for Social Services re-
000 for physician fees for
es.

HEALTH BOARD BILLS have passed the Legis-
illiken for signature. Last medical-
1971 session was SB134, introduced at the
n Zaagman (Grand Rapids). The bill re-
county board of health to be an MD or DO.
ty boards of health do NOT have medical
e Governor is expected to sign all three

Fall and spring programs for outside component medical societies continue to be provided, in cooperation with the three Michigan medical schools and the Michigan Department of Public Health.

Special conferences, such as those on Maternal and Perinatal Welfare and the Medical Aspects of High School Sports, draw a large number of interested physicians.

MSMS and the Michigan Association for Regional Medical Programs have worked together to provide postgraduate medical education for physicians in the Upper Peninsula. Visiting physicians work with local doctors to improve health care of heart disease, cancer and stroke patients.

For the past two years the MSMS Committee on Postgraduate Medical Education has studied the question of voluntary or mandatory continuing education for membership in MSMS and/or recertification.

MSMS at work . . .

. . . communicating with public and profession

The Department of Communications and Professional Information keeps MSMS members informed of activities within the society. It also seeks to make the public aware of progressive medical thinking through the news media, conferences, etc.

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

All new members receive a certificate of membership . . . MSMS members receive *Michigan Medicine*, a monthly publication which carries current medical articles, selected by physician-scientific editor . . . Several pertinent columns by MSMS staff and officers also appear each month . . . *Medigram*, a capsulized two-page news sheet, is also mailed twice each month to members to inform them of late-breaking medical news. Each week a sheaf of clippings about medical news is sent to various Michigan leaders in the health professions.

The Department also services the news media. News releases are sent regularly to 50 dailies and 300 weeklies. News writers call almost daily to obtain background information and news sources for feature stories.

Aware of the need to keep news media updated, MSMS sponsors an annual Medical Writers Conference for Michigan science and free-lance writers. News conferences are called periodically to give the MSMS viewpoint on current topics. Recent meetings dealt with the physician assistant program, efforts to decrease infant mortality, and positive suggestions for handling Medicaid payments.

A weekly radio program, "Prescription for Health," sponsored by MSMS, is produced by station WUOM, Ann Arbor, and sent to 30 other stations.

The Department provides liaison with many groups and leaders from such fields as education, youth service, health agencies, community groups, etc.

IGRAMS
NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 6 1972

ichigan Medicine
December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to
est possible changes in Draft #6 of the proposed articles of in-
ed MSMS foundation. A previous
f the House, which asked for
n Utilization Review and Health
he MSMS Council on Nov. 10 made
ry delegate Dec. 13 for his
nent society presidents and
SMS Council, after reviewing
l submit another proposal to
tes March 20-21.

omotional mailings about a group tour that
MS legal counsel has advised that Medi-
any connection with the agency. Physicians
estions, thus calling attention to the con-
s, 1081 Arlington, Ann Arbor, is promoting
, Michigan Medical Society" without any

the physicians' rate increase
by the federal Price Commission
office, contacted Dec. 16 by
tation before responding. The
wages and not prices and there-
ather than the Price Commission.
aid objectives of the ruling,
dustries Cost Board, is to re-
es by half.

ians to send their $5.00 re-registration
State Board of Registration in Medicine,

ces appropriation bill in its
package for Social Services re-
000 for physician fees for
es.

HEALTH BOARD BILLS have passed the Legis-
illiken for signature. Last medical-
1971 session was SB134, introduced at the
n Zaagman (Grand Rapids). The bill re-
county board of health to be an MD or DO.
ty boards of health do NOT have medical
e Governor is expected to sign all three

MSMS at work . . .

. . . cooperating with component societies and specialty groups

MSMS maintains liaison with Michigan's 55 component county societies. Efforts to encourage and strengthen these contacts are continuous:

1) Staff members attend county medical society meetings, upon request, to initiate personal contact with officers and members. They present the latest information about MSMS activities and solicit comments of members.

2) The 1971 midsummer meeting of the MSMS governing body, The Council invited for the first time the executive secretaries of Michigan's county medical societies. The resultant dialogue led to an open exchange of ideas and a better understanding of mutual duties and problems.

3) The MSMS councilors invite county officers to annual councilor conferences. Delegates, county officers and executive secretaries are able to gain better understanding of the work of their district councilor and The Council as a body.

4) A recent MSMS innovation is the integrated peer review program. This tri-level program deals with insurance claims reviews, the arbitration of disputes, and the review of utilization frequency and charge patterns. The county society initially reviews cases brought before it by physicians, patients, institutions, insurance carriers and government agencies. The regional medical advisory committee acts as an appeal mechanism upon referral of the county committee. The MSMS Committee on Utilization

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

Review and Health Insurance Problems acts as final mediator.

This past year, more than ever before, MSMS is working closer with the MSMS specialty sections and specialty societies. The leaders of the specialty groups now have formed a *Council of Medical Specialties* and sends a representative to The MSMS Council to report progress and discuss common concerns.

MSMS at work . . .

. . . providing insurance programs for members

The group insurance opportunities prove that membership in MSMS provides real dollar savings and vital protection.

Six group insurance plans are available to MSMS members. They include:

1. Professional overhead coverage.
2. Michigan Blue Cross-Blue Shield for hospital and medical-surgical care.
3. A disability-sickness policy.
4. Group life.
5. Accidental death and dismemberment.
6. An umbrella-type supplementary "Personal Prestige Policy."

More than 50% of MSMS members are enrolled in at least one of the plans, at a group rate which offers considerable savings. The Society mails to each new member a series of descriptive brochures concerning group plans available. The Ben P. Stratton Agency, Lansing, is responsible for premium collection and handling of all claims.

In order to participate, a doctor must be a member of MSMS through his county medical society. Interns and residents enrolled as associate members in MSMS are also eligible for any policy.

IGRAMS
NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 6 1972

ichigan Medicine
December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to
st possible changes in Draft #6 of the proposed articles of in-
ed MSMS foundation. A previous
f the House, which asked for
n Utilization Review and Health
ne MSMS Council on Nov. 10 made
ry delegate Dec. 13 for his
nent society presidents and
SMS Council, after reviewing
l submit another proposal to
tes March 20-21.

omotional mailings about a group tour that
MS legal counsel has advised that Medi-
any connection with the agency. Physicians
estions, thus calling attention to the con-
s, 1081 Arlington, Ann Arbor, is promoting
, Michigan Medical Society" without any

the physicians' rate increase
by the federal Price Commission
office, contacted Dec. 16 by
tation before responding. The
wages and not prices and there-
ather than the Price Commission.
aid objectives of the ruling,
dustries Cost Board, is to re-
es by half.

ians to send their $5.00 re-registration
State Board of Registration in Medicine,

ces appropriation bill in its
package for Social Services re-
000 for physician fees for
es.

HEALTH BOARD BILLS have passed the Legis-
illiken for signature. Last medical-
1971 session was SB134, introduced at the
n Zaagman (Grand Rapids). The bill re-
county board of health to be an MD or DO.
ty boards of health do NOT have medical
e Governor is expected to sign all three

MSMS at work . . .

. . . with medical students, SAMA chapters

The Michigan SAMA officers attending the 1970 Annual Session requested that SAMA representatives be given official voting privileges. Frankly stating that many medical students viewed organized medicine with distrust, the spokesman stated: "To our surprise, we found here a vital, responsive, democratic group actively endeavoring to better the practice and availability of medical care in the state."

MSMS believes that students' enthusiasm and fresh viewpoints strengthen the medical profession. Accordingly, the delegates concurred and the three Michigan medical schools seated voting delegates for the first time.

Students also participate on committees of special interest to them, such as drug dependence, rural health, public relations, maternal welfare. SAMA officers periodically report their activities to MSMS and are asked by *Michigan Medicine* to express their views on contemporary medical issues.

For many years, MSMS has given financial grants to the Student American Medical Association chapters in Michigan for programs and conferences. A new MSMS liaison committee of interested doctors and students is set up to hear student concerns and needs.

Working closely with SAMA and the Michigan Hospital Association, MSMS has coordinated a program whereby students serve during the summer in community hospitals. Participants, who have completed their freshman year in medical school, serve under a doctor-preceptor, and receive a stipend from the hospital.

Legislative efforts to assist medical schools and students continue, of course, in the MSMS department of legislative affairs.

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

MSMS at work . . . . . . for more than a century of service

In 1819, the five Detroit physicians practicing in Detroit organized the "Michigan Medical Society" under Territorial laws. Since there were only five members and seven offices, some held two offices.

This society, dedicated to insuring a "clean, well-educated, honest profession in Michigan," was limited largely to observing state medical laws. It was not until June 5, 1866, that about 100 physicians met in Detroit to hear Morse Stewart, MD, claim that "The profession had failed to promote properly the advancement of medical, individual growth and development . . ." As a result the present MSMS was officially founded.

Many members of the new organization were involved in the push to establish a State Board of Health, which was inaugurated in 1873. During the remainder of the century, members grew in scientific knowledge. Physicians were urged to observe the AMA code of ethics, and articles were published in the *Peninsular Journal.* County societies were formed and in 1902, after 17 years of discussion and debate, the organization approved a House of Delegates pattern.

The next 15 years was a time of active growth. The meetings of 1915 to 1920 sound curiously contemporary: Delegates heard about the increase of syphilis and gonorrhea, the rising printing costs of the *Journal*, and the need to be "alert and watchful" in the face of spreading government programs in health care.

The 1930's, although reflecting the effects of the depression, was a decade of great

IGRAMS

NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 6 1972

ichigan Medicine

December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to
st possible changes in Draft #6 of the proposed articles of in-
ed MSMS foundation. A previous
f the House, which asked for
n Utilization Review and Health
he MSMS Council on Nov. 10 made
ry delegate Dec. 13 for his
nent society presidents and
SMS Council, after reviewing
l submit another proposal to
tes March 20-21.

omotional mailings about a group tour that
MS legal counsel has advised that Medi-
any connection with the agency. Physicians
estions, thus calling attention to the con-
s, 1081 Arlington, Ann Arbor, is promoting
, Michigan Medical Society" without any

the physicians' rate increase
by the federal Price Commission
office, contacted Dec. 16 by
tation before responding. The
wages and not prices and there-
ather than the Price Commission.
aid objectives of the ruling,
dustries Cost Board, is to re-
es by half.

ians to send their $5.00 re-registration
State Board of Registration in Medicine,

ces appropriation bill in its
package for Social Services re-
000 for physician fees for
es.

HEALTH BOARD BILLS have passed the Legis-
illiken for signature. Last medical-
1971 session was SB134, introduced at the
n Zaagman (Grand Rapids). The bill re-
county board of health to be an MD or DO.
ty boards of health do NOT have medical
e Governor is expected to sign all three

---

service to members and the public. On August 20, 1931, with a polio epidemic threatening, the MSMS sent an immediate bulletin to all members describing the tell-tale symptoms. Physicians operated on thousands of people under the Afflicted and Crippled Children's program, and their no-fee policy saved the state of Michigan over $3 million dollars. MSMS began working with state health agencies to reduce infant and maternal mortality rates. A doctor placement service was initiated and the House of Delegates approved the group medical-surgical care plan which became Michigan Blue Shield-Blue Cross.

In the 1940's, of course, the important matters were the war and defense efforts. By 1943-44 more than 2,100 Michigan doctors were in the Armed Forces. However, ideas continued to be implemented by MSMS. In 1944 the Michigan Health Council was incorporated, and the following year the Michigan Foundation for Medical and Health Education was born. The first statewide Rural Health Conference was held, and the first Michigan Cancer Conference.

The 1950's ended with the ground breaking of the new MSMS headquarters on Abbott Road, East Lansing. With the heightened post-war emphasis on communications, MSMS continued to work for the profession through publications, radio and television programs, and motion pictures.

In 1961 the MSMS moved to its new quarters to improve services to members and the public. The Centennial Year of the Society was celebrated in 1965 in Detroit. Activities have been modified so committees of the House of Delegates and the Society now study current medical and social issues and recommend action designed to serve the people of Michigan.

Just what does MSMS do for you?

Gently tear the pamphlet from this page and you will have the answers in your hand.

MSMS activities in the fields of economics, government relations, scientific meetings, postgraduate medical education and public relations are clearly and succinctly spelled out for you in this handy brochure, ready to answer your own questions and help you describe the workings of MSMS to your colleagues, patients, families and friends.

Be sure to save this pocket guide for future reference.

MSMS at work . . .

. . . providing opportunities through committees for physicians to study scientific questions and social issues; and recommend action;

. . . representing the profession through legislative work;

. . . conducting socio-economic surveys;

. . . carrying out public service projects;

. . . publishing MICHIGAN MEDICINE each month and the MEDIGRAM newsletter twice monthly;

. . . presenting an Annual Scientific Session;

. . . sponsoring eight group insurance plans;

. . . providing postgraduate clinical programs for component societies;

. . . offering advice to official and voluntary agencies and organizations.

IGRAMS

NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 6 1972

ichigan Medicine

December 18, 1971, Volume 70, Number 32
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

10 IS THE DEADLINE for members of the MSMS House of Delegates to est possible changes in Draft #6 of the proposed articles of incorporation and the bylaws for the proposed MSMS foundation. A previous draft was submitted to the fall session of the House, which asked for specific revisions. The MSMS Committee on Utilization Review and Health Insurance Problems proposed changes and the MSMS Council on Nov. 10 made further changes. Draft 6 was sent to every delegate Dec. 13 for his further study. Copies were sent to component society presidents and secretaries for their information. The MSMS Council, after reviewing other changes suggested by delegates, will submit another proposal to the spring meeting of the House of Delegates March 20-21.

MSMS MEMBERS ARE receiving promotional mailings about a group tour that is NOT sponsored by MSMS. MSMS legal counsel has advised that Medigram carry this disclaimer of any connection with the agency. Physicians have contacted MSMS to ask questions, thus calling attention to the confusion. A firm, Twining Tours, 1081 Arlington, Ann Arbor, is promoting a Rose Bowl Tour "for members, Michigan Medical Society" without any approval of MSMS.

GUIDELINES ARE EXPECTED daily to clarify the physicians' rate increase ceiling of 2.5 per cent announced Dec. 15 by the federal Price Commission in Washington, D. C. The AMA Washington office, contacted Dec. 16 by MSMS, said it would await further documentation before responding. The AMA had argued that physicians' fees are wages and not prices and therefore should be handled by the Pay Board rather than the Price Commission. Price Board Chairman C. Jackson Grayson said objectives of the ruling, based on recommendations of the Health Industries Cost Board, is to reduce rate of inflation in health industries by half.

DEADLINE IS JAN. 1 for physicians to send their $5.00 re-registration fee for 1972 to the Michigan State Board of Registration in Medicine, 1033 S. Washington, Lansing.

STATE LEGISLATURE PASSED the Social Services appropriation bill in its waning days of 1971 session. The health package for Social Services recipients, including line item of $50,045,000 for physician fees for Medicaid, was not an issue in final debates.

SNOWMOBILE, DRUG CONTROL, AND HEALTH BOARD BILLS have passed the Legislature and gone to Governor Milliken for signature. Last medical-oriented bill to pass in the 1971 session was SB134, introduced at the request of MSMS by Sen. Milton Zaagman (Grand Rapids). The bill requires one member of a single county board of health to be an MD or DO. Currently several single county boards of health do NOT have medical input through membership. The Governor is expected to sign all three bills.

ELECTED AS members of the MSMS Judicial Commission for three-year terms are the following: District 1 - Eugene L. Freitas, MD, Detroit and George Mogill, MD, Huntington Woods; District 2 - Robert J. Mason, MD, Birmingham; and District 3 - Justin L. Sleight, MD, Lansing. Doctor Freitas was re-elected to another term. Doctor Mogill succeeds Donald N. Sweeny, Jr., MD, Detroit, who resigned because a change in the MSMS constitution has made him a member of the MSMS Council because he serves as chairman of the MSMS delegation to the AMA and thus he is ineligible to serve on the Judicial Commission. MSMS Past President Mason succeeds Harold A. Furlong, MD, Pontiac and Doctor Sleight succeeds R. Wallace Teed, MD, Ann Arbor.

PRELIMINARY WORK BEGAN FRIDAY in preparing a grant application from MSMS to the federal government for funds to study HMOs from the physician's point of view. Representatives of Medicus Corp., a nationally-recognized health management and research company, met with MSMS staff to lay out the proposed study. Deadline for submission of the grant application is Jan. 15.

ONE OF EVERY FIVE DOCTORS who provide Medicaid has received a survey form as part of a random sampling from the State Department of Social Services asking that it be filled out by typewriter. This is a test to determine reliability of typed data in a computer. MSMS urges your cooperation.

THE STATE BOARD of Registration in Medicine recently re-elected C. Allen Payne, MD, Grand Rapids, as president, and renamed John M. Wellman, MD, East Lansing, as executive secretary. Frederick W. Van Duyne, MD, Flint, is the new vice-president of the board, succeeding Don McLean, MD, Detroit, whose term on the Board expired. New members of the board are Joseph J. Berke, MD, Grosse Pointe; John R. Wilson, MD, Grand Rapids, and Donald T. Anderson, MD, Kingsford.

ABOUT 35 presidents-elect and executive secretaries of component medical societies and MSMS officers participated Dec. 9 in a MSMS Workshop for Presidents-Elect of County Medical Societies at the MSMS headquarters. There was considerable discussion about member services, foundations, need for more physicians, etc. MSMS Council Chairman Brooker L. Masters, MD, MSMS Secretary Kenneth H. Johnson, MD, and MSMS President-Elect John J. Coury, MD, led the discussions. Kits of materials are being sent to those 1972 presidents unable to participate.

DATES WILL BE SET soon for several hearings to be held in January and February by the MSMS Relative Value Study Committee to implement possible changes in nomenclature and coding.

Dec. 18, 1971, Vol. 70, No. 32

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.

© 1971 Michigan State Medical Society.

Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

Second Class Postage Paid at East Lansing, Mich. and at additional mailing offices.

UNIVERSITY OF CAL
LIBRARY SCH OF MED
THIRD & PARNASSUS AVE
SAN FRANCISCO CAL 94122

111772

MEDICAL CENTER LIBRARY
JAN 20 1972

EDIGRAMS
E NEWS FROM THE MICHIGAN STATE MEDICAL SOCIETY

lichigan Medicine
December 30, 1971, Volume 70, Number 33
Michigan State Medical Society
Reading Time: 2 Mins. 35 Seconds

S LEADERS MET WITH GOVERNOR MILLIKEN on Dec. 29 to seek executive
port for HB 5767, the proposed revised medical practice act. Doc-
s stressed elements of the bill which would empower the Board of
istration to issue limited licenses, give the Board flexibility in
ermining passing performances in licensure exams, and establish in
higan a "sick doctors act" to cover such exigencies without revoca-
n of license. Regulation of physician assistants also is proposed.
MSMS delegation included Brooker L. Masters, MD, Chairman, MSMS
ncil; Vernon V. Bass, MD, Speaker, MSMS House; John J. Coury, MD,
S President-Elect; James Fryfogle, MD, Detroit, Vice Speaker; MSMS
se; Robert Prophater, MD, Councilor and Chairman, Legislative Policy
mittee; and Bruce W. Ambrose, manager, MSMS Department of Government
ations.

WATCH FOR YOUR COPY of the Proceedings of the 1971 MSMS House of Delegates which will be in the mail about Jan. 5.

S IS STILL AWAITING a copy of the Phase II Regulations on Physician
Hospital Prices. Copies will be studied by MSMS officers and coun-
ors and appropriate action taken in concert with the AMA. The Phase
Regulations on Physician and Hospital Prices, announced Dec. 16, must
submitted by the Price Commission to the Cost of Living Council prior
publication.

The AMA News on Dec. 20 carried the Price Commission statement on
lth charges, and also the AMA official reply. The AMA declared the
ce Commission decision to be "discriminatory." The decision, the AMA
d, "violates the principles of equal treatment and fair play to im-
e special burdens on small segments of the population -- in this case
sicians, dentists, osteopaths and other non-hospital providers of
lth services."

The Price Commission ruled that physicians' "aggregate price in-
ase shall not exceed 2.5 per cent per year," and that it must be
tified by increases in cost. The Price Commission also said each
sician will be required to maintain a price schedule showing charges
to place a sign in his office notifying the public that the
edule is available for inspection.

AMA TRUSTEE James H. Sammons, MD, of Texas, expertly handled many tough questions in an interview with Lou Gordon over WKBD-TV, Detroit, Dec. 26, on a program carried also over stations in Boston, Cleveland, Los Angeles, Philadelphia, and San Francisco. Mr. Gordon tossed the usual innuendoes at Doctor Sammons about health care costs, doctor availability, national health insurance, lobbying, etc. Mr. Gordon asked the AMA for a spokesman and Doctor Sammons flew up to tape the program Dec. 19. Donald N. Sweeny, Jr., MD, chairman of the MSMS delegation to the AMA, and Herbert A. Auer, manager, MSMS communications department, provided counsel and hosted Doctor Sammons.

ISSUES FACING THE STATE LEGISLATURE when it returns for an expected long 1972 session will include such health-related issues as HB 5767 to rewrite the Michigan medical practice act; physician's assistant bills; budget allocations to include expanded medical education; air pollution controls, etc. The Legislature returns Jan. 12.

The 1971 legislative record on health matters included new laws establishing drug controls, regulating snowmobile operations, and lowering blood alcohol content levels for presumed impaired ability to drive and drunkenness. It also raised annual re-registration fees for all health professions effective for MDs in 1973, and passed a law requiring a MD or DO on all single county health boards.

PRELIMINARY PLANS for the new, spring meeting of the MSMS House of
gates, Monday and Tuesday, March 20-21 were considered by the MSMS
mittee on Rules and Order of Business, which met Dec. 15.

PHYSICIANS INTERESTED in self-assessment programs in medicine may write to the AMA Department of Continuing Medical Education, 535 N. Dearborn, Chicago, 60610, for the new AMA Directory of Self Assessment Programs which describes 19 programs sponsored by national medical specialty associations.

JANUARY WILL BE a busy month for many MSMS committees as they work
resolutions adopted by the fall MSMS House meeting and as they mov
along various projects. The calendar includes: Jan. 5, Committee
Michigan Medical History; Jan. 6, Committee on Maternal Health; Ja
Committee on Public Relations; Jan. 13, Committee on Better Utiliz
of Hospital Beds; Jan. 19 tentatively, Judicial Commission; Jan. 1
Committee on Medical Socio-Economics; Jan. 19, Committee on Utiliz
Review and Health Insurance Problems; Jan. 26, Committee on Mental
Health. The MSMS Council will meet on Wednesday, Jan. 26.

Allied organizations slated to utilize the MSMS Headquarters
January include the Michigan Council of Specialty Societies, Jan.
Michigan Society of Internal Medicine Board, Jan. 9; MARMP Board,
21; State Woman's Auxiliary Executive Committee, Jan. 25.

NEW PRESIDENT of the board of directors of the Michigan Association for Regional Medical Programs (MARMP) is Dean Andrew D. Hunt, Jr., MD, of the MSU College of Human Medicine. He succeeds Dorothy Carnegie, DO, president of the Michigan Association of Osteopathic Physicians and Surgeons. MARMP is expected to announce its new staff executive in January.

Dec. 30, 1971, Vol. 70. No. 33

Michigan
Medicine

MICHIGAN STATE MEDICAL SOCIETY

Published three times each month and four times in December and January, 38 issues, by the Michigan State Medical Society as its official journal. Second class postage paid at East Lansing, Mich. and at additional mailing offices. Yearly subscription rate, $9.00. Printed in USA. All communications should be addressed to the Publications Committee, Michigan State Medical Society, 120 West Saginaw Street, East Lansing, Michigan 48823.

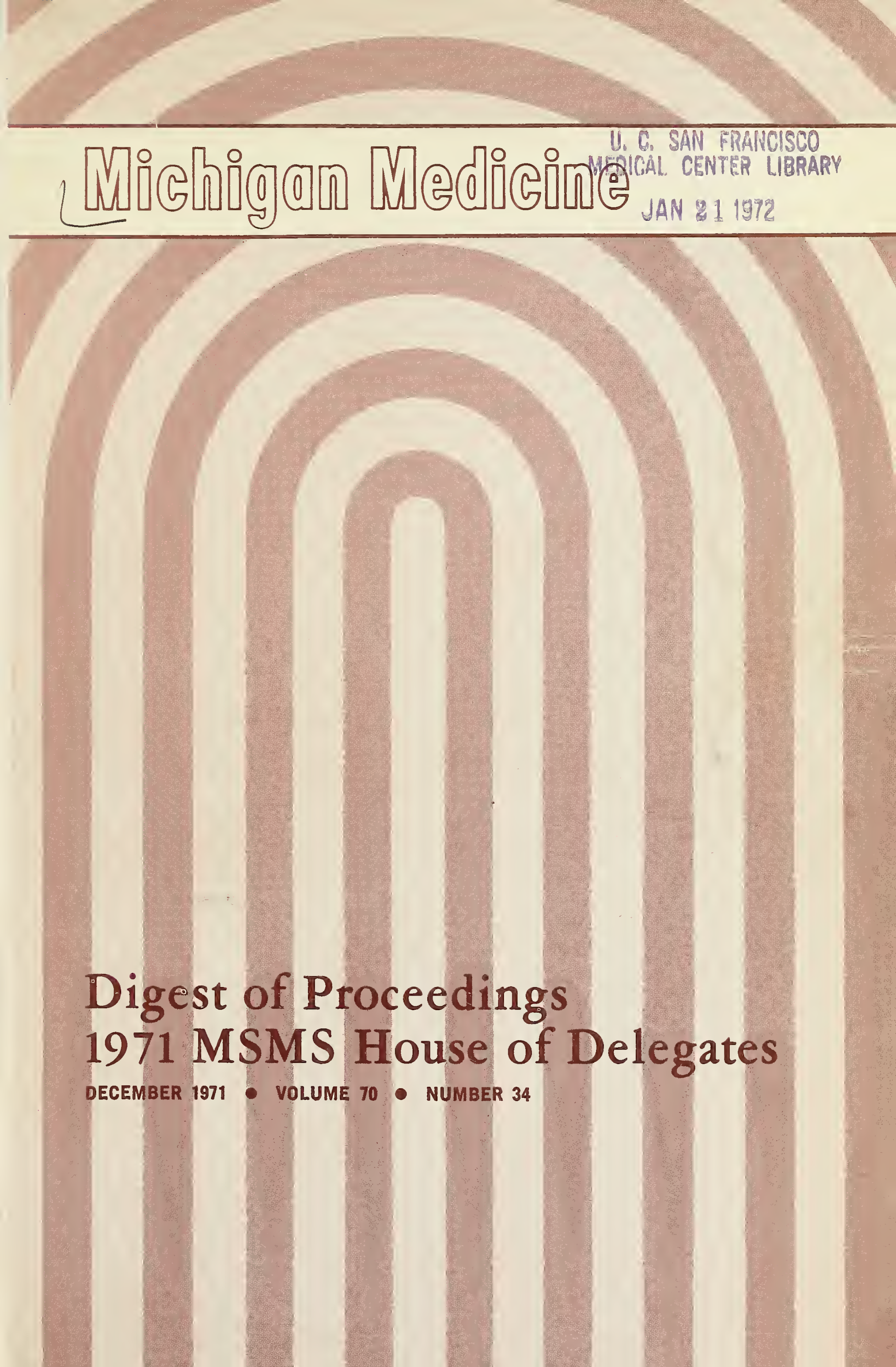
© 1971 Michigan State Medical Society.

Phone: Area Code 517, 337-1351.

EDITOR: HERBERT A. AUER

Second Class Postage Paid at East Lansing, Mic
and at additional mailing offices.

UNIVERSITY OF CAL
LIBRARY SCH OF MED
THIRD & PARNASSUS AVE
SAN FRANCISCO CAL 94122



Michigan Medicine

U. C. SAN FRANCISCO
MEDICAL CENTER LIBRARY
JAN 21 1972

Digest of Proceedings
1971 MSMS House of Delegates

DECEMBER 1971 • VOLUME 70 • NUMBER 34

1971 House of Delegates Proceedings

106th Annual Session

Michigan State Medical Society

How to Use This Digest

For your convenient use of the *Digest of Proceedings,* please note the following arrangement of contents:

Each report is followed immediately by the action of the reference committee on that report and then by the House action on the report of the reference committee. Resolutions are printed as they were finally approved or disapproved by the House.

Table of Contents

Page

Call to Order and Special Reports

Call to Order 5
Invocation 5
Report of Committee on Credentials 5
Report of Committee on Rules and Order of Business 5
Speaker's Remarks 5
President's Address 10
President-elect's Address 11
Treasurer's Report 12
Report of the Michigan Delegation to the American Medical Association 14
Report of Woman's Auxiliary 17
Report of the Michigan State Medical Assistants Society President 17
Remarks by Chairman of Michigan Blue Shield 18

Reports of The Council

Remarks of The Council Chairman 19
Report of Council Activities 25

Committee Reports

Annual Summaries of Council Committees:

Alcohol and Drug Dependence 31
Education Liaison 31
Eye Care 32
Hospital Relations 32
International Health 32
Liaison with Medical Students 32

Page
Liaison with Michigan State Pharmaceutical Association 32
Liaison with State Bar of Michigan 32
Liaison with Board of Registration in Medicine 33
Liaison with State Executive Office 33
Medical Aspects of Organized Athletics 33
Medicine and Religion 33
Rehabilitation 33
Relative Value Study 33
Utilization Review and Health Insurance Problems 34

Annual Summaries of Standing Committees:

Ad Hoc for Malpractice Actions and Professional Liability 34
Ad Hoc on Medical Examiner System 34
Ad Hoc for the White House Conference on Aging 34
Advisory to the American Association of Medical Assistants, Inc., State of Michigan 34
Advisory to the Woman's Auxiliary 35
Cancer 35
Cardiac Disease 35
Child Welfare 35
Governmental Medical Care Programs 35
Highway Injury 37
Hospital Privileges 37
Legal Affairs 37
Maternal and Perinatal Health 38
Medical Socio-Economics 38
Mental Health 38
Michigan Medical History 38
Occupational Health 38
Postgraduate Medical Education 38
Professional Insurance Plans 39
Public Health 39
Public Relations 39
Rural Medical Service 40

Reports of House of Delegates Committees:

Certificates of Commendation 40
Constitution and Bylaws 42

Resolutions

1. Quorum for MSMS House of Delegates 43
2. Medicaid Performance, Surveillance and Utilization Report System 44
3. Appointment of Committee to Consider Two House Meetings a Year 44
4. Change of Dates for Annual Meeting of the House of Delegates 44
5. Establishment of MSMS Malpractice Judicial Panel 44
6. Establishment of a Uniform Fee Schedule for Medicaid Payment 45
7. Continuing Physician Education for Relicensure 45
8. Drug Abuse 45
9. Proxy Vote 45
10. Restructure of MSMS Councilor Districts 45
11. Responsibilities of MSMS President 46
12. Relation of MSMS with Michigan Congressmen 46

Page

13. Summary of Medical Laws 46
14. Homicide Prevention 46
15. Physician Discrimination 46
16. No Fault Malpractice Insurance 46
17. Computer Committee 47
18. Studded Snow Tires for "Emergency" Vehicles 47
19. Institution of Legal Action Against State of Michigan 47
20. Contract with Michigan Department Social Services for Medicaid Services 47
21. Prohibition of Inequitable Prorating of Payment for Medicaid Services 47
22. Lansing as the Annual House of Delegates Meeting Site 47
23. Effort to Repeal or Modify MMS Enabling Act 47
24. Revision of Pharmacy Rules 47
25. Defense of Physician by Michigan State Medical Society 48
26. Non-Participation in Blue Shield Provider Contracts 48
27. Payment of Usual and Customary Fee by Medicaid Fiscal Intermediary 48
28. Consumer Committee 48
29. Discrimination against Physicians and Women in Membership on County Hospital Boards 48
30. Increasing Hospital Construction Costs 48
31. Reporting Medical and Surgical Care to Insurance Companies 49
32. Laboratory Service for Comprehensive Drug Abuse Treatment Programs 49
33. Application of the "Good Samaritan Law" to Physicians Forced to Serve the Emergency Room by Hospital Bylaws 49
34. Abolition of Seven Year Limitation of Service Connection Classification of Veterans Disabled by Multiple Sclerosis 49
35. Revision of Present Geographical Determination of Michigan Variable Fees 49
36. Unsatisfactory Federal Narcotic Registration Form 49
37. Physician Participation with Third Parties 50
38. Definition of a Specialist 50
39. Higher Reimbursement by Blue Shield for Outpatient Surgery Performed in the Physician's Office 50
40. Recommendations for Peer Review 50
41. Blue Cross-Blue Shield Coverage for Medical Students 50
42. Direct Payment to Medicaid Patients 51
43. Direct Payment of National Health Insurance Funds to Patients 51
44. National Health Insurance Legislation 51
45. Elimination of Delegate to Councillor 51
46. Insurance Coverage for Voluntary Sterilization 51
47. Exoneration of a Physician from Conspiracy in the Assassination of a President 51
48. Home Health Services Under Medicare 51
49. Membership Priorities 52
50. $25 Re-Registration Fee 52
51. Nomination of Members of the Corporate Body of Blue Shield 52
52. Physician Relations with Communications Media 52
53. Recognition of Physician's Services to MSMS 52
54. Emigration of Medical Graduates 52
55. Change of DSR Reporting Forms for Blue Shield 53
56. Surveillance and Utilization Review 53
57. Smoking During Meetings of the Michigan State House of Delegates 53
58. Appointment of Physician Members to the Corporate Body of Blue Shield 53
59. Drug Abuse Control 53
60. Medicaid Provision for Preventive Health Care Services 54

Page
61. Delay by Michigan Blue Shield in Payment of Physician's Services Rendered 54
62. Support of Proposed Policy Declaration on Maintenance of Health and Medical Care of National Chamber of Commerce of the United States 54
63. MECO (Medical Education Community Orientation) Project 54
64. Shortage of Physicians 54
65. Payment for Voluntary Sterilization 54
66. Abortion Reform Petition Drive 55
67. Support of Abortion Reform Referendum in 1972 55
68. Financial Aid to Medical Students 55

Special Memberships 55

Presentations and Awards

Fifty Year Awards 56
National Presidents' Awards 56
MSMS Special Awards 56
Employee Award 56
MSMS Flag Awards 56

Elections 56

Reference Committee Personnel 57

Delegates' Record of Attendance 58

Michigan State Medical Society
106th Annual Session
October 3-5, 1971

CALL TO ORDER AND SPECIAL REPORTS

1. Call to Order

The House of Delegates of the Michigan State Medical Society, held at the Civic Auditorium, Grand Rapids, Michigan on October 3-5, 1971, convened at 8:00 p.m., Vernon V. Bass, MD, Speaker and James D. Fryfogle, MD, Vice Speaker, presiding.

2. Invocation

The Speaker called upon Bishop Joseph Breitenbach to gave the invocation.

3. Report of Committee on Credentials

Chairman Charles W. Oakes, Jr., MD, reported 112 Delegates seated, the majority of whom were not from any one county.

4. Report of Committee on Rules and Order of Business

Chairman John H. McLaughlin, MD, reported that the Committee on Rules and Order of Business has thoroughly reviewed the order of business as printed on the first divider in the delegates' handbook. We approve of the order of business, particularly No. 22 thereof which specifies that resolutions may not be introduced after the second meeting of the House, Monday morning, October 4, except by consent of two-thirds of the seated delegates.

The Committee notes that Mr. A. Stewart Kerr, legal counsel of the Michigan State Medical Society, has again been designated to perform the important duties of Parliamentarian. The Committee heartily approves this excellent choice.

Your Committee notes with mixed feelings Resolution 87, passed in the 1970 House of Delegates proceedings, which resolves "that the House of Delegates should prohibit smoking during all of its meetings."

The Committee was pleased to see that the order of business takes note of the recommendation of the Ad Hoc Committee to Study Nominating Procedures of the House, namely, that the nominations be made at the third session of the House on Monday evening, and that the election of officers, from the list of candidates and any additional nominations, take place at the last session of the House on Tuesday evening.

Finally, the Committee wishes again to recommend to the House of Delegates, as it did in 1969 and 1970, that the House vest in the Speaker the authority to recess its proceedings to a time certain, at his discretion, and without the necessity of the vote of the body. Such vesting of authority will constitute the only departure from Robert's Rules of Order, which we recommend otherwise govern the proceedings of the 1971 House of Delegates.

The report was adopted.

5. Speaker's Remarks — Vernon V. Bass, MD

The Speaker outlined the plans and procedures of the House.

(The following report of the Speaker was presented to the delegates in printed form.)

This is a brief review of the implementation of Resolutions adopted by the 1970 House of Delegates. (For complete text of resolutions with House action, refer to the Digest of Proceedings, *Michigan Medicine,* Vol. 69, No. 26, December, 1970.)

Res. 1 — Shortage of Physicians. This resolution was disapproved.

Res. 2 — Reduce the Premedical Requirements for Matriculation in Medical Schools. Letters were sent to the deans of the three medical schools urging them to accept students with a minimum of two years of pre-med education. Replies have been received from all three deans indicating general support.

Res. 3 — Urge Michigan Medical Service (Blue Shield) to Adopt and Use AMA CPT, '70 Edition. This resolution was transmitted by letter to Michigan Medical Service, urging that organization to adopt the CPT for use in its regular and governmental business.

Res. 4 — Divestiture of Control of Blue Cross-Blue Shield Program. This resolution was disapproved.

Res. 5 — Michigan Blue Shield. This resolution was disapproved.

Res. 6 — Change Health Insurance Contract for Members and their Employees. At the request of the Committee on Professional Insurance Plans, Michigan Hospital Service and Michigan Medical Service are developing new coverages containing both deductible and co-insurance features. These programs will be considered by the Committee just as soon as they are approved by the Insurance Commissioner.

Res. 7 — Encouragement of Family Practice & Improved Physician Distribution. A substitute resolution was adopted in lieu of Resolutions 7, 13, 29, 50, 85, and 96. Letters were sent to three medical school deans urging the establishment of departments of family practice. Letters have been received from all three reporting on activities which they feel have the same goal of Resolution 7 to produce more family physicians. Members of MSMS Legal Affairs Committee participated in the spring in a discussion program with the three deans and sponsored by the Michigan Academy of Family Practice. The State Legislature approved a resolution this year respectfully requesting the three universities to establish departments of family practice. The Michigan academy is continuing its efforts.

Res. 8 — MD of the Week Program. The Physician of the Week Program has continued in the 1971 legislative session with remarkable results. Eighteen doctors volunteered for this program. Physicians are offered a $300 honorarium; some accept; most re-channel the money into political uses by legislators they have met in Lansing.

Res. 9 — Temporary Registration of Medical Doctors. The objectives of this resolution are embodied in the proposed revised Michigan Medical Practice Act being developed by the Board of Registration in Medicine. Information indicates the necessary legislation will be introduced in the Fall Session of the Legislature.

Res. 10 — Establishment of Counselling Service — Medical Socio-Economics. A substitute resolution was adopted in lieu of Resolutions 10, 46, 47, and 90. In accordance with the resolution, MSMS has instituted its Bureau of Economic Information with John Anthony as Bureau Chief. The Bureau has already initiated several important projects, including a survey of the overhead costs of medical practice and a survey of physicians' fees.

Res. 11 — Adoption of Relative Value Guide by Blue Shield. This resolution was withdrawn.

Res. 12 — Component Medical Societies Liaison. In accord with this resolution, MSMS has urged component medical societies to establish periodic liaison with area legislators. Several societies have invited legislators to speak at their meetings and Ingham County has followed the example of Kent County by holding monthly meetings with area legislators. In addition, MSMS has established the Key Man Committee which encourages physician-legislator contact on an informal, one-to-one basis.

Res. 13 — Incentives to Practice in Areas of Need. A substitute resolution was adopted in lieu of Resolutions 13, 29, 58. (The House also adopted a substitute for Resolutions 7, 13, 29, 50, 85, and 96.) See Resolution 7 above.

Res. 14 — Election of AMA Delegates. This resolution was disapproved.

Res. 15 — Multiple Methods of Practice. This resolution adopted a MSMS policy that "There are many acceptable methods of practice" and that "multiple options for the delivery of medical care should remain open to physicians." Copies of the resolution were referred to MSMS Department of Government Relations and the MSMS Department of Economics because the resolution has overtones for work in those two fields; and further the resolution was studied by the MSMS Committee on Public Relations which acted to "receive Resolution 15 for information and possible use in MSMS statements, etc."

Res. 16 — Merger — Medical Socio-Economics Committee and Governmental Affairs Committee. The House took no action on this resolution.

Res. 17 — Health Examination for Athletes. This resolution regarding physical examinations for high school athletes has been under study all year by the MSMS Committee on Medical Aspects of Organized Athletics. The Committee has conferred twice with executives of the Michigan High School Athletic Association and the Flint Public Schools. A subcommittee is developing an improved standard health reporting card, and is exploring the many ramifications of how many physicians are really available on a voluntary basis to conduct annual or periodic (less than annual) physical examinations for boys — and for the growing number of schools that now have league competition for girls. It is expected that a member of the Committee will introduce a resolution into the 1971 House of Delegates to clarify certain aspects of Resolution 17 and the MHSAA has promised to study possible MSMS recommendations to change athletic examinations for the 1972-73 school year.

Res. 18 — Individual Case Participation, and

Res. 19 — Non-Participating Physicians of Blue Shield. Resolution 18 which supported the concept of individual case participation with Blue Shield and Resolution 19 which upheld the policy of nondiscrimination in payment (by Blue Shield) to subscribers for services rendered by non-participating physicians were both called to the attention of Michigan Medical Service. Both were reviewed by the MSMS Committee on Public Relations for information and use in MSMS statements.

Res. 20 — Preservation and Restoration of Great Lakes. A letter was sent to Governor William G. Milliken, as requested in the resolution, informing him of the MSMS support of efforts to prevent further pollution of the Great Lakes and MSMS concerns for enforcement of current laws. Governor Milliken thanked MSMS for its concern and advice.

Res. 21 — Ambulance Personnel Training. This resolution urges physicians to take leadership in providing training of those persons concerned with the immediate care of the acutely ill and injured on a continuing basis. The MSMS Committee on Highway Injury met on February 17, 1971 and directed a letter to all Presidents of component medical societies emphasizing deficiencies in many local ambulance ordinances and the necessity for improved training programs for emergency medical technicians. Three nationally recognized comprehensive training programs were suggested for increased training and efficiency.

Res. 22 — Approval of Radiation Health and Safety Act of 1970. This resolution was withdrawn.

Res. 23 — Professional Standards for Athletic Trainers. A substitute resolution was adopted in lieu of Resolutions 23 and 24. Letters were sent to the Superintendent of the Michigan Department of Education and the Michigan High School Athletic Association recommending that schools appoint certified athletic trainers. The National Athletic Trainers Association was also informed. State officials concur with the intent. In reality the NATA certification program is young and small and few certified trainers are available as yet.

Res. 24 — Appointment of Certified Athletic Trainers. See Resolution 23 above.

Res. 25 — Support of the Governor's Proposal for Control of Drug Abuse. A substitute resolution was adopted in lieu of Resolutions 25, 43 and 75. This resolution supported necessary legislation to implement the goals outlined by the Governor in his Special Message on Drug Abuse in 1970.

The Governor's Drug Program is embodied in House Bill 4882 and Senate Bill 591 of the 1971 Session. MSMS has informed sponsors of the Bill and members of the committees dealing with these bills of our support. Bills are now before Senate Judiciary Committee.

Res. 26 — Public Educational Programs on Drugs. A substitute resolution was adopted in lieu of Resolutions 26 and 27. See Resolution 32.

Res. 27 — Postgraduate Training Programs on Drug Abuse and Drug Dependence. A substitute resolution was adopted in lieu of Resolutions 26 and 27. See Resolution 32.

Res. 28 — Medicaid Allowance for Immunization. This resolution resolved to seek expansion of the Medicaid program to include reimbursement to physicians for immunization procedures.

This objective has been discussed with Bernard Houston, Director, Department of Social Services, and Doctor J. K. Altland, Medical Consultant for the Department. Such change in policy would have to occur at the Federal level. We have thus informed by letter Michigan Congressmen. Likelihood of expanding Medicaid to preventive measures at this point in time is slight.

Res. 29 — Maldistribution of Physicians. See Resolution 7 above.

Res. 30 — Coordination of Various Governmental Medical Care Programs. This resolution urged efforts by MSMS and its delegation to the AMA to eliminate overlapping in medical care programs and develop programs on the basis of sound planning and development.

The Michigan Delegation introduced a resolution on this subject at the AMA's Boston meeting in December 1970, which was referred to the AMA Board of Trustees. MSMS also continues its liaison with government agencies in efforts to make government programs as effective and equitable as possible.

Res. 31 — Reaffirmation of Michigan State Medical Society Policy Statement on Abortions. This resolution reaffirmed the 1968 MSMS policy statement on abortion. The resolution was brought to the attention of the MSMS

Committee on Legal Affairs, which presented our MSMS position to the MSMS legislature and was brought also to the attention of the MSMS Committee on Maternal Health.

Res. 32 — Hospital Facilities for Drug Dependence. This resolution was considered by the Committee on Alcohol and Drug Dependence at its meeting of March 31, 1971. The Committee also reviewed resolutions 26-27 which had been amended and combined by the 1970 House of Delegates.

These resolutions were concerned with hospital facilities for drug dependent persons and postgraduate training programs on drug abuse and drug dependence.

A third resolution on educational program on crime and delinquency was also discussed. This resolution had been referred to the Department of Communications and Public Relations and referred to the Committee with the request that it take the leadership in establishing programs to help combat crime and drug abuse.

The Committee readily accepted the responsibility of providing leadership for the scientific knowledge needed to carry out the proposed programs. However, the Committee felt the Department of Communications and Public Relations and the Committee on Public Relations would be more proficient in the actual establishment of programs and matters having to do with publicity. The Committee is in the process of finding out what each component society is doing along these lines and when this information is obtained, the Committee will make plans for the future.

Res. 33 — Mediation of Physician-Hospital Disputes. This resolution urged establishment of boards of arbitration to mediate disputes between hospitals and physicians, and was referred to the Michigan Delegation to the AMA.

The Delegation introduced a resolution on the subject at the AMA's Boston meeting in December 1970. The AMA House considered a substitute resolution urging state and local societies to establish boards to mediate such disputes. The substitute was referred to the AMA's Council on Medical Service.

Res. 34 — Necessity of Postgraduate Study. This resolution developed a MSMS policy position which endorsed "the principle of voluntary life-long postgraduate study for all physicians" and urged that programs and incentives be developed along this line. This support of PG study is being used in promoting MSMS postgraduate conferences and programs; and a copy was referred to the MSMS Committee on Postgraduate Medical Education which continues its study of ways to challenge every doctor to participate in life-long study.

Res. 35 — Division of Legislative & Executive Functions. This resolution was disapproved.

Res. 36 — Opposition to Anti-Substitution Repeal. This resolution directed MSMS to resist all attempts to repeal Anti-Substitution Legislation.

Anti-Substitution Repeal Legislation has not been introduced in this Session of the Legislature. Organized pharmacy has said it would not seek such legislation.

Res. 37 — Reimbursement of Michigan Medical Service Board Members. This resolution, concurring in The Council's recommendation that MMS physician board members not be reimbursed, was received for information by The Council.

Res. 38 — Continuation of Volunteer Lobbying Program. This resolution resolved that MSMS continue the MD of the Week Program.

The program is continuing as in 1970 with hopes to extend in the fall session.

Res. 39 — Objection to Reimbursement of Chiropractors in Federally funded Health Programs. This resolution objected to reimbursements of chiropractors in federally funded health programs.

Federal HR 1, amending the Social Security Act, provides for study of chiropractic without immediate recognition under Medicare. At state level chiropractic services are paid under Medicaid, pursuant to an Attorney General's opinion. MSMS has objected both to the Governor and Department of Social Services.

Res. 40 — Printing of MSMS Directory of Members. Resolution amended The Council's original recommendation to instruct that an annual directory be published with a listing by component societies with a city-county cross-indexing. The 1971 Directory was published in January as an issue of *Michigan Medicine,* using the photo offset process from IBM computer print-outs as an economy measure. The resolution ordered that the Directory be printed annually.

Res. 41 — Councilor for Oakland County. This resolution was disapproved.

Res. 42 — Extra Meeting of MSMS House of Delegates. This resolution was disapproved.

Res. 43 — Drug Control. See Resolution 25.

Res. 44 — Malpractice and the Contingency Fee. This resolution refers various recommendations for elimination of legal professions' contingency fee system to The Council for further study.

Through MSMS efforts, a joint Senate-House Study Committee on the entire matter of Malpractice and Professional Liability in the field of medicine has been established. The contingency fee will be one of the items for consideration by the Study Committee.

Res. 45 — Rehabilitative Care. This resolution directed that the Rehabilitation Committee, with the cooperation of the Socio-Economics and Hospital Relations Committees, develop guidelines for rehabilitative care and appropriate remuneration for same. The Committee on Rehabilitation is now in the process of developing such guidelines.

Res. 46 — Establishment of Socio-Economic Department. See Resolution 10.

Res. 47 — Establishment of Socio-Economic Department. See Resolution 10.

Res. 48 — Drug Intoxication and/or Addiction. This resolution urged MSMS take action through its Legal Affairs Committee to declare that drug intoxication and addiction constitute a disease and should be a Medicaid benefit.

Although initial efforts were made, activity has failed to gain attention.

Res. 49 — Uniform Billing Practices. This resolution was disapproved.

Res. 50 — Medical School Departments of General Practice. See Resolution 7.

Res. 51 — Formation of the Michigan State Hospital Staff Association. This resolution cited the need of such an organization oriented to (1) the problems of hospital care, (2) providing advisory services to staff groups and, (3) permitting function of a strong active group to assist medical staffs of hospitals in their efforts to maintain high quality patient care. The Council disapproved a previous recommendation from the Committee on Hospital Relations and referred "the matter of the relationship of medical staffs to organized medicine back to the Committee for more intensive study and future report to The Council."

The MSMS Council on July 31, 1971 adopted the following recommendation as a substitute for the Committee's recommendation:

> "That every effort be made to encourage all specialty and medical groups to become active within the structure of organized medicine."

Res. 52 — Establishment of Priorities for the Expenditure of MSMS Funds. This resolution was disapproved.

Res. 53 — Responsibility of Physicians Accepting Third Party Payments. This resolution was disapproved.

Res. 54 — The Patient's Right to Choose Manner of Payment. This resolution was disapproved.

Res. 55 — Dissolution of the Corporate Relationship of Michigan State Medical Society to Blue Shield. This resolution was disapproved.

Res. 56 — Disposal of Disposables. This resolution was considered by the Committee on Public Health at its meeting of February 25, 1971.

The Committee has recommended that a letter be sent to all hospitals in Michigan informing them of the resolution, and requesting the hospital purchasing agents to re-evaluate the purchase and use of disposables. The hospitals to be requested to re-evaluate the types of techniques being developed and are to be discouraged from using nonessential disposables. Copies of the communication to be sent to Michigan's Governor and the proper committees of the Michigan Legislature.

The letter has been written and is under consideration by The Council.

Res. 57 — Third Party Default by Delay of Payment or Arbitrary Reduction of Fees. This resolution was disapproved.

Res. 58 — To Produce More Physicians. See Resolution 7.

Res. 59 — Defense of Michigan Doctors. This resolution was disapproved.

Res. 60 — Dissatisfaction with the Operational Effectiveness of Michigan State Medical Society. The House took no action on this resolution.

Res. 61 — MSMS Relationship with Outside Groups, Associations, Corporations, Governmental Units or Other. The House took no action on this resolution.

Res. 62 — National Health Plans. This resolution was disapproved.

Res. 63 — Composition of State Comprehensive Health Planning Advisory Council. This resolution expressed a view that fairness requires that a comparable number of providers, preferably practicing physicians, be added to the State Advisory Council for each additional consumer representative and to advise the Office of the Governor and the Chairman of the State Advisory Council of this view. A communication was sent to each of the named officials and a response from the Chairman was received and noted.

Res. 64 — Commendation to Michigan Comprehensive Health Planning Advisory Council. This resolution commends the State Comprehensive Health Planning Advisory Council for opposing passage of Michigan Senate Bill 1756 which would cover chiropractic services under Blue Shield. A communication was transmitted to the State Executive Office and the Chairman of the State Advisory Council but the bill has since become law.

Res. 65 — Increase State Funds for Alcohol Programs. This resolution requested the Legislature to approve more adequate amounts of money for approved alcohol programs.

The Governor has recommended an additional $375,000 to augment the community alcoholic clinics in the state. There has been no further action on this issue.

Res. 66 — Abolishment of Regional Screen Variation in Reimbursement by Blue Shield. This item is under study by the Committee on Medical Socio-Economics which will make its recommendation just as soon as the data received from the Cost of Doing Business Survey and Fee Survey are processed and evaluated by the Committee.

Res. 67 — Compensation for Medical Service in Extended Care Facilities. The House took no action on this resolution.

Res. 68 — Bylaw Amendment for Membership Transfers. This resolution was disapproved.

Res. 69 — Guidelines for Funds Derived from the Supervised Care of Staff Patients. As requested in the resolution, a copy of the "Guidelines for Funds Derived from the Supervised Care of Staff Patients" was sent to each hospital chief of staff in Michigan; and it was published in *Michigan Medicine.*

Res. 70 — Socio-Economic Department. See Resolution 10.

Res. 71 — Chiropractic. This resolution called on each county medical society to inform state legislators of the HEW evaluation on chiropractic. To assist the county societies, MSMS mailed pamphlets outlining the HEW conclusions to physicians along with the November 18 *Medigram.* MSMS has also regularly reported on chiropractic legislation through its publications.

Res. 72 — Disassociation of MSMS from Michigan Blue Shield. This resolution was disapproved.

Res. 73 — Civil Prosecution of Individuals Associated with Possession or Transmission of Dangerous Drugs. This resolution seeks legislation to make it an offense to allow and/or condone the use of narcotics and dangerous drugs within any residence.

House Bill 4882 or Senate Bill 591 would establish a closed regulatory system for controlled drugs. If either of these bills is passed it will be a violation to possess any of the controlled substances without registration or prescription.

Res. 74 — Privilege of Minors to Give Consent for Examination. This resolution seeks legislation that would allow minors to give their own consent for examination including pelvic.

Subsequent to strategy discussion in Legal Affairs Committee, a file of various states' legislation relative to minors and medical treatment has been collected. Legislation will be recommended to give minors appropriate authority over their own medical treatment.

Res. 75 — Support of the Governor's Proposal for Control of Drug Abuse. See Resolution 25.

Res. 76 — Business Relationships Between Michigan Medical Service and Professional Corporations. A copy of this resolution was sent to Michigan Medical Service and this matter is now being studied by a management committee for review and recommendation to the Michigan Medical Service Board of Directors.

Res. 77 — Association Between MSMS and Michigan Blue Shield. This resolution was disapproved.

Res. 78 — Proposed Michigan Blue Shield Amendment to its Articles of Incorporation. This resolution was disapproved.

Res. 79 — Relationship of Blue Shield and MSMS. This resolution was disapproved.

Res. 80 — Physician Staffing of Blood Donor Clinics. This resolution requested the Department of Public Health to rescind/or modify the present rules which require the physical presence of a physician at blood donor clinics and MSMS to request component medical societies to train paramedical personnel to staff the clinics, and arrange with physicians, ambulance services and hospital emergency rooms to provide care for the rare emergency occurring at blood donor clinics which do not respond to first aid treatment. Communications were addressed to MDPH Director and all Presidents of component medical societies to conform with the Resolution. MSMS subsequently received a letter from Public Health that the rule was under consideration for possible modifying or rescinding.

Res. 81 — Preparation of Contractual Fee Schedule for Governmental Agencies. The Committee on Relative Value Study is preparing a new RVS which utilizes the American Medical Association's Current Procedural Terminology

(C.P.T.) as the basis for coding and describing medical services. MSMS sections and the various specialty organizations have conferred with the RVS Committee to establish unit values which, when multiplied by a $5 conversion factor, will as far as possible reflect prevailing charges for each service.

Res. 82 — Payment of Physician Charges by Credit Cards. This resolution requested the Judicial Commission to consider the ethical aspects of such credit card systems for physician payments.

The Judicial Commission reported to the Speaker that the guiding opinion of the AMA's Judicial Council is that although the use of such cards in advertising is not strictly unethical, it is another step toward the commercialization of medicine and would result in further deterioration of the public relations image of the medical profession. The Commission therefore advised that although such bank card use in advertising is not strictly unethical, such practice is often in poor taste and less than professional.

Res. 83 — Repeal of Basic Science Act. This resolution urged repeal of the Basic Science Act in its entirety.

Legal Affairs Committee's recommendation to postpone legislative move until 1972 concurred in by Council.

Res. 84 — Pilot Program of Baccalaureate Study Physician Assistant. This resolution unanimously endorsed the proposed Western Michigan University pilot program for physician assistants and such a letter was sent to WMU. A subcommittee of the MSMS Education Liaison Committee has been serving in an advisory capacity to WMU, which in July did receive a federal grant to complete its curriculum planning. WMU plans to enroll its first students in the 1971-72 winter term.

Res. 85 — Establishment of a Family Practice Department. See Resolution 7.

Res. 86 — Conference on Maternal and Perinatal Health. This resolution was withdrawn.

Res. 87 — Smoking During Meetings of House of Delegates. This resolution prohibits smoking during meetings of the House of Delegates and the success of its implementation depends upon the thoughtful behavior of those delegates who still use tobacco.

Res. 88 — Michigan Medical Service Board of Directors. This resolution was disapproved.

Res. 89 — 30 Years In, Out with $500 per Month. This resolution was disapproved.

Res. 90 — Establishment of Negotiating Agents. See Resolution 10.

Res. 91 — Increased Allocations for Medical Schools. This resolution expresses appreciation to the Legislature for passage of Senate Bill 1179 in 1970, which provided $195,000 additional allowance for medical schools.

The Legislature has been informed of this House of Delegates action and is aware of MSMS concern for constant expansion of medical schools.

Res. 92 — Opposes Contingency Fee System in Malpractice Cases. This item has become a part of legislative study on malpractice and professional liability.

Res. 93 — Opposes Anti-Substitution Repeal. This resolution is the same as Resolution 36.

Res. 94 — Drug Abuse and Minors' Consent. The House took no action on this resolution.

Res. 95 — Voluntary Elective Sterilization. This resolution directs MSMS to advise that hospitals discontinue using sterilization committee procedure, request Blue Shield, Medicaid and all other insurance and government medical plans to remove restrictions on payment for surgical sterilization on an in-patient or out-patient basis and to advise the appropriate legislative committees in the State Legislature and U. S. Congress of this position requesting payment for such sterilization. Michigan Blue Shield responded that "medically necessary sterilization of either a male or female has been a benefit — on an in-patient basis — under all MVS contracts and will be expanded to include out-patient locations for contracted groups." The AMA suggested introduction of a bill in the U. S. Congress to carry out the intent of this resolution. Michigan Department of Social Services advises that the Medicaid program considers these procedures to be an eligible benefit.

Res. 96 — Encouragement of Family and Rural Practice. See Resolution 7.

Res. 97 — The Multiplicity of Hospital Inspections. This resolution directed "a study and make recommendations for eliminating unnecessary inspections for report to The Council or at the latest to the 1971 MSMS House of Delegates." The MSMS Committee on Hospital Relations ascertained there were a number of inspections required by a variety of government agencies and professional organizations but believes them to be necessary for the health, safety and welfare of patients, employees and the visiting public.

The Committee also determined that such inspections provided assistance and advice in order that hospitals can continue to meet the required regulations for licensing, certification and accreditation.

Res. 98 — Chairman of AMA Delegation to be Ex Officio Member of The Council. This resolution was laid over to the 1971 Session of the House since it included amendments to the MSMS Constitution. It will be presented to the House of Delegates as part of the report of the Committee on Constitution and Bylaws.

Res. 99 — Support of Michigan Medical Service Plan. This resolution was disapproved.

Res. 100 — Possibility of Forming Medical Foundation in Michigan. This resolution directed The Council to investigate the desirability of forming such a foundation and if found desirable take the necessary steps for forming one.

The Committee on Utilization Review and Health Insurance Problems has been given the responsibility for making a feasibility study. It is reporting its recommendations to The Council and the House of Delegates that a foundation be formed with specific purposes and objectices.

Res. 101 — Medicare Home Health Services. This resolution urged expansion of home health services under Medicare and Medicaid.

In view of the financial crisis in the state this resolution has not been pursued vigorously.

Res. 102 — Change of MMS Service Policy to Indemnity Policy. This resolution requests the Legislature to change the enabling act of Michigan Medical Services to allow an indemnity policy.

Great amount of activity in the Legislature this year centering on "Blues" resulted in year long study of both organizations. There is no direct action proposing indemnity policy.

Res. 103 — Greater Cooperation with Michigan Hospital Association. This resolution was referred by The Council to the Committee on Planning and Priorities, which reported it felt the present liaison committee working with MHA fulfilled the intent of the resolution.

However, the Committee noted that additional liaison was being accomplished through meetings of the MHA and MSMS staffs on a periodic basis, as well as by special groups of members of each organization meeting to solve specific problems or to discuss matters of mutual concern.

Res. 104 — Hospital Committee on Efficiency. This resolution requests "hospitals to consider the formation of at least a six-member committee representing equally the Executive Committee of the hospital staff, the hospital administrative staff and the hospital governing board to act as a coordinating advisory unit to initiate and stimulate meaningful projects and activities for achieving increased effectiveness, economy and quality medical care in hospitals." The concept of such a committee was previously contained within a joint MSMS-MHA Hospital-Doctor Efficiency Study. This resolution was also directed to the Joint Commission on Accreditation of Hospitals for information and interest.

Res. 105 — Educational Program on Crime and Delinquency. This resolution reaffirms the MSMS concerns for educational programs to help combat crime and drug abuse. The MSMS Committee on Public Relations has studied possible ways to implement the resolution as has the MSMS Committee on Alcohol and Drug Dependence.

Res. 106 — Professional Liability Legislation. This resolution resolved that MSMS propose legislation that would require insurance companies doing business in Michigan to provide coverage for all licensed physicians.

This subject will be part of the legislative study on malpractice in professional insurance.

Res. 107 — Opposition to Bennett Amendment. A telegram expressing MSMS opposition to the Bennett Amendment was sent to both Senators Hart and Griffin at the close of the 1970 meeting of the House of Delegates.

Res. 108 — New Pictures for MSMS House of Delegate Leaders. This resolution is being implemented with the cooperation of those concerned.

Res. 109 — SAMA Representation in the House of Delegates. This resolution amended the MSMS Bylaws to provide for delegates from SAMA chapters in Michigan as voting members of the MSMS House of Delegates.

Appropriate changes were made in the printed MSMS Bylaws and the 1971 House of Delegates will include representatives from the SAMA chapters as indicated.

6. President's Address — Harold H. Hiscock, MD

This report will be in the nature of the State of the Union message.

Your State Medical Society, at the present time, is in the best general condition it has ever been in. More necessary work is being done for the members than ever before. Never in any time in our history has it been more important that our Society be healthy and strong.

Most of this has been accomplished since the reorganization of our central office staff through Phase 1 of our reorganization plan.

As you know, Phase 2 is underway and you have been asked what further improvements you would like by way of services, activities or structural change.

Under the new MSMS organization, we have three departments under Director Warren Tryloff.

The Communications Department under Herb Auer has improved communications with our officers, members, and the public. We are now receiving up-to-the-minute reports in depth in the doings of our State Society. News clippings about medicine and government are provided as they appear in various Michigan papers. Many meetings are being held with newspaper editors and reporters to improve relations.

The Department of Government Relations is under the direction of Bruce Ambrose and our relationships with our legislators are greatly improved. The "Doctor-of-the-Week" program has been a great success. Our weakest point which Mr. Ambrose hopes to improve is our local contacts with legislators while they are at home. Some county societies, such as Kent, Ingham, and Bay, are doing an excellent job in this field.

Our Department of Operations, headed by Richard Campau, and the Bureau of Economic Information, John Anthony, Chief, is beginning to give us results from their first survey on the cost of medical practice in the State, comparing 1966 to 1970. Some of these results are startling. The results will be most helpful in the work of our MSMS committees which have to deal with insurance companies and government.

In passing I would like to say what a pleasure it is to go to our Lansing Office and be received in such a friendly manner from the receptionist to our director, Mr. Tryloff. Questions are answered rapidly and if facts are not at hand, they are soon obtained and a detailed report sent to you in a few days.

Our first revised RVS in several years has been given to you. The Committee has done an excellent job. Now the problem becomes how will you use it? It seems to me it must be used state-side to bargain with insurance companies and government. If MSMS doesn't do it, I am sure some of our county medical and specialty societies will. Insurance companies and government will insist on negotiating with the State Society. Medicaid, Medicare, Crippled Children Commission, etc., private insurance companies are a few of the agencies we will have to meet with. What a job — yet, this must be done or we will begin to receive directives from our government such as our Canadian Colleagues have had. The head of the Quebec Specialty Societies said that their greatest weakness in dealing with their government was not having their own fee schedule at their first meeting.

Last year in my address I outlined my plan to bring together the specialty societies into a formal society. Four meetings were called and 23 specialty groups participated. They have organized a "Council of Medical Specialties" and have selected a chairman. Frequent meetings are planned to discuss economic and governmental subjects that affect them. Their new chairman made his first report to The Council in July. At the present time there is no formal connection between the "Council of Medical Specialties" and MSMS. They thought they would like to study for a year what this relationship should be.

An added, unexpected value from this new group was the formation of the new Michigan Society of General Surgeons. This has grown very rapidly and the society will meet here Wednesday to elect officers.

There were no formal meetings held with the Council of Medical Staffs, however, two informal meetings were held at which time they presented some of their views. It is hoped that a formal meeting will be held this Fall with their Council. There seems to be some misunderstanding about peer review by this group. However, local hospitals will still continue to do their own peer reviews. They have the duty to inspect their own admissions as to quality of medical care based on some criteria as advocated by Doctor Beverly Payne. However, there must be some appeal mechanism to the MSMS regional or state Peer Review Board.

It is obvious from the above statements that this House of Delegates should meet two times a year. The Fall meeting could continue to be the major yearly meeting with the election and installation of the officers. The scientific meeting could then be in conjunction with the Spring meeting of the House.

The greatest strength of our State Medical Society must be our county medical societies. In going to meetings throughout the State in the past year, I found that only a few of their general meetings were well-attended. In some counties these meetings were almost non-existent. The duties of running the county society too often are left to a Board of Directors. One has to wonder why such a lack of interest in our local societies. Could it have been that years ago they began to give up their authority to hospital staffs and specialty societies? Isn't it time that we regain this authority, either by making representatives of the medical staffs and specialty societies members of the governing board of our county societies, or maybe we could take a lesson from the labor unions and appoint stewards of the county medical societies to the hospital staffs to see that the rights and privileges of their members are protected from unnecessary directives issued by hospital administrators.

Powerful county medical societies working with our State Society in dealing with our present and future economic problems are necessary; otherwise, we all will be splintered into many small groups. It takes very little imagination to visualize what will happen under this type of organization.

County societies, in order to be useful to their members, must represent them in their right to practice medicine in their community and to admit and treat patients in their local hospitals. They must represent their members in dealing with government and insurance companies, in cooperation with MSMS. They must set up with the State Society adequate peer reviews and make them function. They must cooperate with the State Society to solve the malpractice insurance problem. They must cooperate with their communities in area-wide medical planning boards. Even if these few things are done, we will have stronger county societies throughout the state.

Medical Education:

Our medical schools have grown fast in the past few years. U-M has 225 freshmen, Wayne State has grown to 208 and MSU has a combined entrance class of 119, so that soon Michigan will be graduating 500 doctors per year. While increasing the student bodies, we must continue our high standards of education.

We are graduating an ever-increasing number of MDs but more than half of them are leaving the state after completing their education. I recommend that this House of Delegates direct The Council to appoint an ad hoc committee to investigate the cause of this yearly exodus and to find means to stop it. The committee should consist of members of the Michigan State Medical Society, educators from our three medical schools, several legislators, and representatives of the public.

The State Society should investigate ever-enlarging and costly intern and resident training programs. We should know their cost and who is going to pay for them. We should know their future plans.

It seems that these programs become geared to turn out a certain number of specialists per year whether the community in which the program is located needs them or not. How can you make this program flexible enough to produce only the specialists we need at a given time? How can you encourage this over-supply of specialists to migrate to communities in our state which need them?

Should these communities help pay for their training?

One question that troubles many doctors who are not connected with hospital-teaching programs is how to get their patients admitted to these institutions and not have to spend hours doing intern and resident work.

Our critics are still with us in ever-increasing numbers, both within and without our profession.

I attended a meeting a few weeks ago and listened to a spokesman for one of our major critics. He had a few sound reasons for minor changes but as a whole he used the same old non-verified figures to try to frighten us. He advocated control over the cost of care and the quality of care — but under their controls. There was no mention of a possible meeting between his organization and ours to sit down in a meeting to discuss the delivery of health care in the future. They repeatedly said that the consumers were the No. 1 party to any health plan, but that only they would speak for the consumers. These critics are serious in trying to gain control of our profession.

The only answer to such critics is a strong State Medical Society with the cooperation of strong county medical societies that will set forth our plans and fight for them. We must be ready with our plan of quality health care which only we can provide, better peer review which only we can do, and our own fee schedules based on our own equitable and just economic findings. Many of you feel that these jobs stated above are awesome and impossible. I am very optimistic because of the experienced leaders that are going to take over the direction of this Society next year, and the many young and dedicated members I have encountered throughout the state.

In conclusion, I know there will be changes. These changes must be for the better and not just for the sake of change. Any changes in the form of a corporation or foundation must be so constituted that the members will be in complete control. Decisions of this corporation should not be in the hands of an autonomous board. We must keep the major voice in the delivery of medical care . . . we are experts in this.

THE REFERENCE COMMITTEE on Reports of Council and Officers, Herbert W. Harris, MD, Chairman, recommended approval of the recommendation that this House request The Council to consider reasons for exodus of Medical Doctors from this state and that consideration be given as to the possible remedies.

THE HOUSE adopted the report of the Reference Committee.

7. President-Elect's Address — Sidney Adler, MD

A Time for Doubting

If it hasn't already been said by all Delegates present, it probably will be by most of them:

"These are trying times for the medical profession."

It can be said with equal force that these are trying times for everyone in every walk of life.

Let me warn those of you who look to me for answers that you probably will be disappointed. One of the most trying problems of the times is the assumption on the part of so many people in government, schools, the professions and the public that each knows how to answer all questions — how to unscrew the inscrutable — how to confound the experts. They look with ill-disguised contempt upon men like me who, without embarrassment, say "I don't know" and answer a question with a question.

Well, I don't know the answers to the problems that beset the medical profession, and I have even less confidence in those who try to convince me of their expertise and to feed me easy answers.

The fact that they can't agree among themselves is pretty good evidence that their crystal ball isn't working any better than mine.

I do have some questions of my own to put to you tonight, and if in the asking I give the impression that I think I know part of the answer, it's because I possibly do. The questions are these:

For instance,

Health Maintenance Organizations:

This has become a national catch-phrase, but what does it mean?

I can point out that we are now seeing university medical centers, teaching hospitals, large hospitals and community medical centers competing for the medical dollar. There is ample evidence that this *type* of *care* is far more expensive than office calls in private offices. Who measures quality and on what basis?

Emergency rooms are rapidly being converted into 24-hour OPD's. Hospitals provide more and more medical service in an almost geometric progression. I question whether this is cheaper or better care. What happens when dollars run out on a capitation basis? Have you ever heard an HMO talked about where the promoters didn't expect to be supported by government or foundation grants? There is nothing new about the idea of salaried doctors. There is nothing new about the idea of prepaid care. Does an HMO do anything more than to put the two ideas together and add public funds to the mix?

The average consumer has already questioned the rising cost. It is no longer a question of ability to pay for service, but rather the patient's willingness to pay; large and powerful consumer groups no longer want to pay out-of-pocket dollars for care. But do grants from government lower total costs?

The AMA has already indorsed National Health Insurance thru its Tax Credit Plan.

Where is the physician availability in the system of tax credits for health care on the national level? Certainly that expedient is not functional and does not get at the heart of the problem. Its approach is by default; it is neither what the consumer wants, nor what the politicians will accept.

Where do we go from here? Should the Federal government take care of those in need? If so, how?

The Federal government is already in deficit financing and its fiscal integrity leaves much to be desired. Just note where the dollar is going.

For instance,

Medical Foundations:

This has become a popular catch-phrase in medical politics, again, what does it mean?

Should we in the medical profession become a trade union and become involved in collective bargaining? If so — how and with whom? Are we equipped with staff — know how? What will a statewide Foundation do for the doctor and the consumer? Will it improve patient care?

Perhaps in Michigan this is an outgrowth of the inability of Michigan Medical Service to communicate its problems to the Michigan State Medical Society. The State Society hasn't done its job in cooperating, either, and a negative position has come to the forefront. Aren't those who think that a foundation can solve the problem kidding themselves?

I do *not* see the State Medical Society launching out in this area on a state-wide basis. Perhaps it can be done on a county level; I'll have to be shown how it will work on any level.

As in the case of HMO's, the organizers of Foundations seek public funds to support them. Is that something our Society should get into?

For instance,

Relative Value Studies:

Biennially, we perform an academic exercise — we shovel fog. Through the years, I haven't seen any statistical validity to the Michigan RVS, or any evidence of its fiscal impact. If it had validity, would we want it? Should this Society fix physician's charges? How can we accept the principles of usual, customary and reasonable for Federal Medical Programs and then set up a fee schedule called MRVS — it's really paradoxical.

Peer Review:

Is another national catch-phrase. Perhaps we should go back to the term — Utilization Review — and study the frequency of use patterns of medical service in practice — both office and hospital. Study, yes. But control?

HEW has recently given grants to study this area to 29 medical societies. Federal government funding of hospitals, Medicare, Medicaid are methods of controlling doctors and patient care. If we don't want to be controlled, how far should our Society go into this field?

Item —

Improvement of Michigan State Medical Society:

Here, I can make some definite proposals. The House of Delegates should meet twice a year. Things are moving too rapidly in the delivery of health care on the local, state and national levels. The medical profession is struggling for survival in its present form.

We should increase staff work to assist the House of Delegates and have in-depth reviews well in advance, so that the grass roots physician is made to realize what is going on.

Item —

Michigan Blue Shield:

Why shouldn't the House of Delegates elect the 36 members of Michigan Medical Service corporate body who in turn will elect the 12 physician members to the Blue Shield Board? Why should we let Blue Shield pick them for us? We help support legislative representatives in Washington and Lansing at heavy expense. Which has the greatest day-to-day effect upon us as physicians — legislatures or Blue Shield policy makers? We can put our people on the Blue Shield Board at no cost to the Society. Does it make sense not to?

In Summary:

Somebody is sure to say that we can't turn back the clock, and that's true. It also can be said that martyrdom commonly leads to suffering and death, no matter how meritorious the cause may have been. The distinction between commitment and martyrdom is faint and elusive. All too many people define "commitment" as agreement with their personal views.

Do you want *me* to risk leading the Society to the headman's block by following the road of social activism to whatever destination or calamity lies at its end, or to consider, at least, leaving politics to the politicians, social welfare to the sociologists, economics to the economists, and endeavoring to concern the Society with the art and science of medicine? Certainly we are dedicated to delivery of health care on the highest standard.

The members of this Society come from different segments of the State's population, different political parties, different economic backgrounds. As individuals, they are free to promote any political, social and economic views which they may entertain. But should the Society become a forum for their debate, as I fear may be the trend? The question is not whether the Society should be part of the community — of course it should, and it should serve that community as best it can. But should it attempt to act beyond the limits of its Constitution and By-Laws, or to concern itself with phases of community life not directly related to the art and science of medicine?

To avoid disregard of my original admonition that there are no easy answers to the problems of the day, let me merely express doubt and say "I don't know."

I'm no angel, but if I'm to represent all members of the Society, as I want to do, there are areas into which I should fear to tread. I intend to proceed with caution, and, with your support, I hope that I can prevent the problems of the Profession and of the Society from becoming worse during my incumbency. That's about as much as any reasonable man can expect from one who has witnessed what has happened over the past few decades.

8. Treasurer's Report — John R. Ylvisaker, MD

In recent years a format of report had been established which will be followed again this year for ease of comparison and for identification of major areas of concern. A preliminary report of the Phase II Organizational Study will be added to the three divisions of previous reports.

I. The Asset Management Program

This program is now a little over 3 years old. Previous reports are available in which the general outline and rationale of the program has been detailed.

A significant change was effected in the past six months. Investment as previously managed directly by the Board of Managers had become cumbersome and too unwieldy to respond quickly to indicated changes. The Detroit-based investment firm of Heber Fuger and Wendin was therefore selected on a competitive basis, with detailed study of comparative capability, and was provided with discretionary authority to manage the Capital Reserve and Creative Reserve funds. Broad policies are established and investment activity reviewed a minimum of three times yearly by the Board of Managers to provide direction and control over interim management by the investment firm. Custodian accounts were established with Manufacturer's National Bank. Transfer of the accounts was accomplished on 4/19/71.

The following tables summarize the progression of values and current status:

	Original $ 1968-69	Market Value 4-19-71	Market Value 8-31-71	Present Yield (On Orig. $$)	Annual Est. Income
Capital Reserve:	$277,000	$322,609	$328,000	5.5%	$ 15,000
Creative Reserve:	375,000	355,000	355,000	3.8%	14,000
Totals:	$652,000	$677,609	$683,000	4.6% (avg)	$ 29,000

The program has also provided the opportunity to maintain positive cash flow money in short-term investments providing additional income:

	(1971 estimated)		$ 18,000
Total Income			$ 47,000
Expenses:	Mortgage interest $650,000 @ 6¼%	$40,600	
	Investment Management	3,000	
	Total	$43,600	43,600
Profit			$ 3,400

Portfolio investment distribution:

Investment	Capital Reserve	Creative Resource
Bonds	31%	11%
Preferred Stock	19%	25%
Common Stock	38%	62%
Cash	2%	2%
Land	10%	—

II. The Financial Condition of MSMS

The Society is in a sound financial condition and is operating within a controlled budget. Following the correction of a 1969 budget deficit of $25,400 as well as the funding of a depreciation of $25,000 to the Capital Reserve Fund, an actual surplus existed in 1970 of $76,500. Projected cash flow for 1971 and the estimated effect of a 5% increase in expense and a 1% increase in income for 1972 is as follows:

	1970	1971	1972
ncome	——	$ 998,000	$1,008,000
Expense	——	910,000	955,000
Surplus	$ 76,500	$ 88,000	$ 53,000
Cumulative Surplus		$ 164,500	$ 217,000

II. Preliminary Report of the Phase II Organizational Study

The Phase II study conducted by Alexander Grant & Company is reported separately and has been distributed. The preliminary information is of interest but will be refined, nalyzed, and reported later. The most sensitive and significant information is presently being analyzed. This relates to he structure and organization of the Society and the representation and participation of the members. The Advisory Committee will continue analysis and review with later submission of recommendations for changes as indicated.

V. Remarks and Recommendations

My report of 1970 called attention to two major deficiencies of MSMS:

1. A low level of participation and therefore representation of enrolled members.
2. An absence of tangible direct member benefits.

The first is under intensive review and analysis by the Phase II study. The second was the object of a directive by the 1970 House of Delegates to develop and propose dues-related member benefit programs.

As your MSMS Treasurer, I feel a deep concern for the relevance of dollars collected in dues to the full value of dollars spent in the conduct of your Society's business. Repeatedly I hear and sometimes ask the question:

"What does the Michigan State Medical Society do for me?"

My listening posts bring an answer from the "silent majority" which is in conflict with that of the physicians who are actively engaged in Society activities.

The silent majority says: "nothing" or "not enough."

The active minority says: "More than you know."

The difference is that the active minority is aware of the multitude of *intangible benefits* that accrue to the dues-paying member while the silent majority looks for, and can't find, the *tangible benefits* for which they feel an acute need.

I contend that the Society can and should provide both. It can and should return to its members tangible benefits which have a dollar value equal to or greater than the dues collected and, simultaneously, amortize the expenses incurred in supplying intangible benefits essential to furthering the altruistic and humanitarian goals of the medical profession.

I have the firm conviction that the Society can establish and maintain a program of benefits so significant that no practicing physician can afford to be without membership.

How? Primarily through the power of numbers of professionals who have common needs that must be met by each, individually or collectively on a continuous basis.

A variety of services and commodities are basic to the day-to-day life of the practicing physician. Many of these lend themselves to purchase and administration at group rates providing substantial savings over individual rates. More important, many can be "packaged" to produce an additional increment of savings over and above the group rates. And, lastly, minimal percentages of "profit" or income derived from an aggregate of servicing fees can then become the base for a continuing subsidy to "benefit" programs such as needy physician, survivor, or education subsidy programs.

Such programs are under study. Individual or packaged insurances include malpractice, homeowners, automobile, liability, umbrella, major medical, term life, etc., also car leasing and group purchasing. Present progress indicates that such programs will likely be made available to the membership within two years at savings of $400 to $800 per member over conventional rates.

In the meantime, there exists an immediate need and opportunity for this House of Delegates to create a Member Assistance Fund out of existing surpluses with realistic means of replenishment over the next two years by minimal dues support.

From the 1971 fiscal year-end cumulative surplus of approximately $165,000 I *recommend* that $100,000 be set aside to initiate a *Member Assistance Fund.* This fund will be made available as a source of assistance for needy member physicians or their families. It will be administered and invested under the direction of the existing Board of Managers. For the first two years it will be replenished or augmented by interest or dividends and by $2/year/member (approximately $12 to $13,000 per year) from the presently existing dues structure. It will then be re-evaluated in two years by report to the House of Delegates to determine productivity and future value and to receive further support from possible fee income of services now under study.

THE REFERENCE COMMITTEE on Ways and Means, John W. Moses, MD, Chairman, recommended disapproval of the Treasurer's Recommendation that $100,000 be set aside to initiate a Member Assistance Fund because there is a committee of The Council whose specific purpose is to determine priorities.

THE HOUSE adopted the report of the Reference Committee.

9. Report of the Michigan Delegation to the American Medical Association — Donald N. Sweeny, Jr., MD, Chairman

Summary of the Actions of the Michigan Delegation to the American Medical Association 1971

The Michigan Delegation to the American Medical Association met on five occasions in the past year to study, consolidate, and draft resolutions for presentation at the Clinical and Annual Conventions of the AMA. (Boston, Mass. 29 Nov. - 2 Dec., 1971 and Atlantic City, N.J. 20-24 June 1971). The activities of the Clinical Convention in November have been reported to The Council and will not be reported here.

In addition to studying, discussing in committee and acting on 158 items of business which came before the House of Delegates at the 120th Annual Convention, the delegates heard a stirring address by the President of the United States as well as the inaugural and exaugural speeches of Dr. Walter Bornemeir, outgoing President of the AMA and of Dr. Wesley Hall, incoming President. The House of Delegates was in session 14 hours. There were Reports as follows:

Board of Trustees — 31
Council of Constitution and Bylaws — 2
Council on Medical Services — 8
Council on Medical Education — 4
Judicial Council — 2
Council on Long Range Planning — 1
Resolutions — 104

Drs. John Coury and George Slagle of the Michigan Delegation served on Reference Committees.

This report is divided arbitrarily into several sections to make recommendations to this House more meaningful. It does not pretend to be comprehensive.

I. Address of President Nixon:

The President was accompanied by Mrs. Nixon, Hon. Elliot Richardson, Secretary of HEW, Roger Egeberg, MD, Asst. Secretary, Health and Science Affairs, HEW, and Merlin DuVal, MD, Asst. Secretary Designate.

The President appealed to the Medical Profession to provide especial leadership in at least two areas:

1. Reform of the American Health System

   He expressed opposition to National Health Insurance (Kennedy) and called attention to the Administration proposals of HMOs.

2. Drug Abuse

   He called for an all out battle against drug abuse — "the number one national enemy." He announced a new White House Special Action Office for Drug Abuse Prevention with its charge to correlate all activities in this problem.

Recommendation:

1. The proposal concerning the use of Health Maintenance Organizations as a modus operandi in the delivery of health care deserves careful study and understanding. The meaning and implications of the system are poorly understood and the concept is too broad at present to accept without further experimentation. The report of The Council of Medical Service concerning HMOs and Foundations for Medical Care should be widely distributed to constituent societies for their information and understanding.

2. The campaign against Drug Abuse must be expanded at the local as well as the national level and is a matter for all county societies to implement.

II. Delivery of Medical Care

1. Right of Access to Medical Care

The House elaborated its existing policy regarding the right of every citizen to the proper medical care by adoption of the following words:

> "It is the right of every citizen to have access to adequate medical care but it is the responsibility of the citizen or of society to seek it. The American Medical Association will use all means at its disposal in an endeavor to make adequate medical care available to meet the needs of each person. In the spirit of inheritance of the Oath of Hippocrates, the AMA reaffirms its obligation to humanity. In this effort, the AMA cannot assume the responsibilities of government or the individual citizen. The AMA also recognizes the right of the physician to choose whom he will serve and the conditions under which he will render this service. These are integral essentials in the delivery of quality medical care."

Recommendation:

This is a revision of previous statements and should receive distribution to constituent societies.

2. Peer Review

The House reaffirmed that peer review should be considered a professional function and as such shall be carried out by physicians or under the sponsorship of the county or state medical association. Certain definitions were accepted.

Recommendation:

MSMS should continue to press for effectual utilization and peer review by physicians both in private settings and in all federal and government programs and hospitals.

3. Health Maintenance Organizations

The House noted that the HMO concept is still experimental and unproven as a nationally acceptable or applicable solution for providing health care delivery or cost control. It expressed discomfiture of the wide administration support given to this scheme prior to valid proof of its general effectiveness and asked the AMA to continue to study and evaluate HMOs and to keep the medical profession informed.

Recommendation:

Wide distribution of the report from the CMA on Health Maintenance Organizations.

4. Foundations for Medical Care

The House urged that more knowledge be gained concerning this rapidly burgeoning vehicle for the delivery of medical care. It accepted the report of the Ad Hoc Committee which had studied the mechanism and urged that the Board of Trustees appoint a representative to the American Association of Foundations for Medical Care in response to the invitation already extended the AMA.

Recommendation:

This Ad Hoc Committee Report is comprehensive and deserves wide distribution.

5. Regional Medical Programs

The House suggested closer liaison at the local level with RMP to insure adequate representation and participation by practicing physicians. It noted with regret that under present legislation Regional Medical Programs have changed from "educational" to "projects for the delivery of Medical care." This was not the original intent of the legislation.

Recommendation:

MSMS send timely reports to The Council and the AMA Delegation in this regard so that local and national efforts to control the mechanism can be correlated.

6. Blue Shield and Private Health Insurance

The House noted that in many instances the elderly were not properly informed concerning the benefits actually provided under existing programs. It also urged that the National Association of Blue Shield Plans assure its member plans which are labeled "usual, customary or reasonable" are in fact reimbursing at that level.

7. Direct Billing

The House reaffirmed its strong support for the concept of direct billing and urged that the AMA continue its negotiations to provide physicians with the option of direct billing or assignments in all programs for third party payment for medical services.

Recommendation:

MSMS should continue to inform its members on the MMS Board of these commitments.

8. Nursing Homes and Extended Care Facilities

The House recommended that further efforts be made to urge the Social Security Administration to:

1. Revise its policies limiting reimbursement for physician visits to nursing home patients under Medicare.
2. Give recognition to the different types and levels of care which patients require.
3. Accept the nomenclature of Current Procedural Terminology.

III. Medical Education

1. "How Medical Students Are Being Taught"

This excellent CME report of new curricula changes, new teaching methods, and new education philosophies deserves careful perusal by those interested in medical education at any level.

Recommendation:

Distribution to constituent societies for use by proper liaison committees with schools and hospitals with training programs.

2. Foreign Medical Schools

The House accepted a basic change in policy which outlined a program for the enrollment in AMA approved programs of graduate medical education of American graduates who would then be eligible for licensure after one year of supervised clinical training.

Recommendation:

MSMS Committee on Legislative Activities should study this policy change anent possible suggested legislative change in the State of Michigan.

3. SAMA-MECO Projects

The House recommended that SAMA-MECO community projects receive the support of State, County and Individual members.

Recommendation:

MSMS should have an active part in the implementation and control of these extra-mural community projects of the Student American Medical Association.

IV. Medical Manpower

1. Report of CME and Council of Medical Manpower

This comprehensive report was adopted. It outlines the advances made in the procurement of medical manpower while at the same time maintaining professional competency.

2. Loan Programs

The House urged constituent societies to promote community programs to provide facilities and loan programs for students in return for which the student agrees to return to the community after his formal training.

3. Medical Assistants

The House reaffirmed its policy which gives authority and prerogative to the physician to delegate technical procedures to allied health workers with the distinct understanding that the granting of such privileges shall in no way abrogate the physician's primary responsibilities to the patient.

4. Prior Service by Non-Medical Manpower

The House reaffirmed its strong opposition to restrictions of third party payments resulting from prior utilization of non-physician health care services.

Recommendation:

Each of these items deserves study and proper implementation at Council level of the MSMS.

V. Hospital Services

1. Mediation of Physician-Hospital Disputes

The House adopted a comprehensive report which outlines procedures for proper mediation of these problems and urged county societies to follow these procedures.

2. Medical Staff and Governing Boards

The House *again* requested the Joint Commission for Accreditation of Hospitals to have as a requirement for accreditation, when legally possible, that the medical staff be represented by voting member or members on hospital governing boards.

3. Plant and Equipment of Hospitals; Time of Survey

The House asked the JCAH to consider more emphasis on plant and equipment status of institutions undergoing survey; to schedule its inspections with the convenience of the institution and its medical staff in mind; and to collaborate with state medical associations to the fullest extent in evaluating medical staff activities.

4. House Officers

County Medical Societies were urged to improve mechanisms for increased participation opportunities for house officers at all levels of society activity and at a reduced dues structure.

Recommendation:

For information of those concerned.

VI. Drugs

There were many resolutions and much interest in the problems relating to recent restructive activities of the Federal Drug Administration. The more important of these:

1. Endorsed the policy of the FDA which placed "high reliance" on clinical experience in determination of drug effectiveness and recommended relabeling or reformulation in case of product other than those in the "probably effective" category.
2. Urged Congress to take especial care in regulating actions of "careful non-controversial scientific studies."
3. Approved revisions in state pharmacy regulations that forbid the unauthorized substitution of drug products.
4. Accepted a comprehensive report on "The Current Status of Drug Abuse."
5. Urged that amphetamines and stimulating drugs be used with restraint in obesity problems and that these drugs be changed from Schedule III to Schedule II.

Recommendation:

Refer these actions to appropriate committees of The MSMS Council for implementation.

VII. Public Health

1. Teenage Pregnancy

The House urged that the teenage girl whose sexual behaviour exposes her to possible pregnancy have access to medical consultation and contraceptive advice consistent with her emotional and physical needs and further that physicians so consulted be free to prescribe in accordance with his best medical judgment unfettered by state regulations.

2. Venereal Disease

The House urged an intensified public and professional educational program on venereal disease with emphasis on reporting and improved research for developing an active vaccine.

3. Medical Emergencies

The House recommended that the AMA urge the Federal Communications Commission to establish a special radio frequency for medical emergency broadcasts.

VIII. Professional Liability

The House of Delegates adopted a report of the Professional Liability Committee of the Board of Trustees which announced:

1. The establishment of a liability insurance program under joint sponsorship of the AMA and appropriate constituent societies which do not have programs.
2. The development of an AMA Data Collection Center on liability problems.
3. The organization of patient safety conferences.
4. Urged the President of the United States immediately to appoint a Commission on Malpractice Insurance with the active assistance of the AMA.

Recommendations:

These problems should be under continued study by The Council of the MSMS and the Legislative Affairs Committee.

IX. By-Laws

1. The AMA By-Laws were amended to provide:
    (1) Direct membership for interns and residents
    (2) Separate Sections on Psychiatry and Neurology
2. The Board of Trustees was asked to study two proposed amendments:
    (1) To establish a Section on House Officers
    (2) To give SAMA Delegates full rights and privileges of delegates.
3. Approved Guam Medical Society as a Territorial Society with delegate membership.

Recommendations:

The Delegates to the AMA from Michigan need instruction on the problem of the proposed amendments.

X. Communications

1. The House instructed the AMA to determine the opinion and desires of the *total* membership on critical basic issues by a formal opinion poll of the entire membership and that an ad hoc committee of the House be appointed to implement this recommendation.
2. Approved a special report "Computer Systems in Medicine" as a "landmark document."
3. Directed that the 1971-72 budget be made available with appropriate graphs and charts to constituent societies and individual members.
4. The House suggested that State and County Societies consider adoption of a plastic identification card for registration of physicians at their meetings modelled after the card used by the AMA.

XI. Constitutional Convention

Dr. Wesley Hall suggested a "Constitutional Convention" which would remold the AMA "to give our association and its councils and committees the regular transfusion of new blood which would help keep it alive and vigorous."

XII. 1971 Annual Meeting AMA House of Delegates (14)

ELECTION

PRESIDENT ELECT:	Carl A. Hoffman, M.D., West Va.
VICE PRESIDENT:	Ralph C. Teal, M.D., Calif.
SPEAKER:	Russell B. Roth, M.D., Pa.
VICE SPEAKER:	J. Frank Walker, M.D., Ga.
TRUSTEES:	Drs. John M. Chenault, Ala.; Raymond T. Holden, Washington, D.C.; John R. Kernodle, No. Carolina; Donald Woods, Ind.; Robert B. Hunter, Wash.; Jere W. Annis, Fla.

COUNCILS

Constitution & Bylaws:	Drs. Carroll L. Witten, Ky.; John H. Burkhart, Tenn.
Medical Education:	Drs. James W. Haviland, Wash.; Bernard J. Pisani, N.Y.; C. Willard Camalier, Jr., Washington, D.C.; Guy A. Owsley, Ind.
Judicial Council:	Dr. Henry I. Fineberg, N.Y.

In conclusion, this report could not have been made without the help of Miss Else Kolhede, Executive Secretary of the Wayne County Medical Society, whose wisdom more often than not makes fuzzy resolutions and policy statements meaningful.

THE REFERENCE COMMITTEE on Reports of Council and Officers, Herbert W. Harris, MD, Chairman, recommended (1) to The Council that copies of the AMA reports on Health Maintenance Organizations and Foundations be sent to each component county medical society for their information, (2) that requests for instruction as to whether a section on House officers be established under the Bylaws of the AMA and whether SAMA delegates should be given full rights and privileges of the AMA House of Delegates be considered by The Council and the advice be given by them, (3) that an AMA Constitutional Convention would be expensive and should not be undertaken without further study.

THE HOUSE adopted the report of the Reference Committee.

10. Report of the Woman's Auxiliary — Mrs. Francis P. Rhoades

(The following report of the President was presented in written form.)

It is a pleasure to present to the House of Delegates, a summary of the activities of the Woman's Auxiliary to the Michigan State Medical Society.

Michigan's theme this year was, "Open the Eyes of Your Mind" — look around you and see what you can do, either as an Auxiliary member or as an individual, to make your community a better place in which to live. Assume "Adult Responsibility" was our National Auxiliary's theme, and we believe the members of our forty county auxiliaries have done both of these!

Complying with National's directives, we emphasized AMA/ERF, COMMUNITY HEALTH (Adult Physical Fitness) HEALTH CAREERS, LEGISLATION and MEMBERSHIP.

Thirty-three counties participated in fund raising activities, budgeted donations, and memoriam gifts for AMA/ERF, with a total contribution of $28,163.01. For the sixth consecutive year, Macomb was recognized at the National Convention as the winner of the County Achievement Award for auxiliaries in the 61-100 membership category. Michigan was the runner-up with the largest contribution per capita ($8.56) in the North Central Region.

COMMUNITY HEALTH programs varied in health-related fields with our component auxiliaries assisting with inner-city school hot lunch programs; camp physicals; polio vaccine programs; free laboratory tests for the public; Red Cross Blood Banks; distribution of "Today's Health" in schools, libraries, and institutions; and using various "Package Programs" in schools and colleges covering Drugs, Venereal Disease, Alcohol, etc. A most successful 2-day Spring Conference was held emphasizing PHYSICAL FITNESS AND SAFETY. Workshops were conducted and a stimulating talk was given by Mrs. William Milliken, wife of our governor, titled, "Whither the Good Earth?" Six counties now have some type of Home-Centered Health Care programs including Mobile Meals and Homemaker Service, and Bay County has now reached their original goal — that of making Mobile Meals of Bay City a self-sustaining community project.

Our HEALTH CAREERS Chairman serves as a Delegate to the Michigan Health Council. Much interest is shown in Health Careers with various counties purchasing films for schools, holding Poster Contests, and participating at County Fairs. One hundred Ingham County Auxiliary members worked on a Health Career Day which was attended by 700 young children. Genesee County, alone, has 28 Health Career Clubs totaling 488 students. These groups have given approximately 24,371 hours in four hospitals during 1970-71.

For the fourth year, the Auxiliary has held a Legislative Day in cooperation with the Michigan State Medical Society. Each year the attendance and interest in medical legislation increases; this year the attendance was 110, with 38 Legislators attending the luncheon at the personal invitation of an Auxiliary member.

MEMBERSHIP continues to be an area of great concern; although many new members are obtained each year, the over-all figures show a decrease in membership. Our National Auxiliary will celebrate its 50th anniversary year in 1972, and its goal is 100,000 members. To date, there are approximately 91,000 — we have a long way to go in one year, but the goal can be reached. Doctor, does your wife belong? Auxiliary members are needed if we are to successfully support the many community health programs and projects.

Our Auxiliary continues to sponsor Michigan's three medical school WA/SAMA Chapters, whose membership consists of our future doctors' wives and, hopefully, future Auxiliary members.

International health projects continue to have great appeal for our members with donations and tons of pharmaceuticals, equipment, and medical supplies collected and delivered to World Medical Relief.

Each quarterly issue of the AUXILIUM, as well as several issues of MICHIGAN MEDICINE, carried articles by state officers and chairmen relating to their fields of endeavor.

Our Historian compiled the forty-five year history of our organization and its achievements in anticipation of our Auxiliary's complete history being printed for our 50th anniversary.

It has been an interesting and very busy year having attended over forty meetings including many workshops, seminars, conferences, adjoining state auxiliaries' conventions, district meetings, and numerous county meetings.

My sincere and grateful thanks to the Michigan State Medical Society for their many courtesies, splendid cooperation, and financial assistance during the year; for the advice, help, and guidance of our Advisory Committee, and a special "thank you" to Mrs. Jackie Van Deventer, liaison between the Woman's Auxiliary and the Michigan State Medical Society, for her invaluable suggestions, time, and effort.

In order for an auxiliary to function effectively, it needs the support, understanding, and close relationship with its own Medical Society. Having received this support, how could we fail? Thank you for making this a most enjoyable year — with your cooperation it has been a real pleasure to have served the Auxiliary as President!

11. Report of the Michigan State Medical Assistants Society — Mrs. Betty Boers

(The following report of the President was presented in written form.)

We met for our Twenty-first Annual Convention on April 29, 30, May 1 & 2, 1971 at Weber's Inn, Ann Arbor, Michigan. Speakers for the sessions were: Sheldon Fellman, M.D. who discussed, "Relative Fertility of Mongoose and Man". Robert Lovell, M.D. who spoke on "The Medical Aspects of Cigarette Smoking"; George Morley, M.D. spoke on "The Terminal Care of the Cancer Patient"; "Vascular Surgery" was the topic of Richard Kraft, M.D.; and Irving Feller, M.D. described "The Total Care of the Burn Patient". Theme was "The Three D's — Discovery, Dedication and Devotion".

Elections were held at the Convention and the newly elected officers for the group are: President, Mrs. Betty Boers, Kalamazoo County; Vice President, Mrs. Audrie Chute, Oakland County; President-Elect, Miss Margaret Broadwell, Wayne County; Recording Secretary, Mrs. Arlene Bublitz, Bay County; Treasurer, Mrs. Elaine Roekle, Saginaw County; Speaker of the House, Mrs. Lee Bosard, St. Clair County; and Vice Speaker of the House, Mrs. Louise Cole, Washtenaw County.

A Summer Seminar was held at Boyne Mountain, Boyne Falls, Michigan on July 10th and 11th, 1971. "Be in the PINK, avoid the BLUES" was the theme. Speakers were: Wilford S. Nolting, MD who spoke on "Very Small New Born"; Mrs. Audrie Chute gave a presentation of "The Three Eyed Dragon"; John Kihm, MD gave an illustrated talk on "A Year's Experience Doing Total Hip"; and Mr. Morley Fraser, Director of Athletics at Albion College, spoke on "How to Keep Teenagers Off of Drugs".

A Leadership Training Seminar will be held September 26, 1971 in St. Joseph, Michigan. Berrien County and Ottawa County are co-hosting the event. The theme of the seminar is, "At the Helm of Leadership". We have invited Mrs. Marie Young, President of American Association of

Medical Assistants, Inc. to be our guest. David W. Hills, MD will talk on "Coming Trends in Medicine"; K. Robert Lang, MD will speak on "The Working Wife"; and Gene E. Maddock, MD will speak on "Radioisotopes in Medicine". Printed matter will be available for the officers and committee chairmen as to their respective duties.

The annual convention of the American Association of Medical Assistants, Inc. will be held in Atlanta, Georgia in November 1971. Delegates from Michigan are: Margaret Broadwell (Wayne County), Ethel Lundgren (Genesee County), Patricia Austin (Washtenaw County), and Betty Boers (Kalamazoo County). Alternate delegates are: Audrie Chute (Oakland County) and Lee Bosard (St. Clair County). Michigan will be promoting Barry H. Alford, MD for the National Advisory Board.

The Mid-Winter Educational Seminar will be held in Battle Creek and the hostess county is Calhoun County Medical Assistants Society. Speakers will talk on "Child Abuse", "The Kidney Foundation" and "The Physician's Assistant".

Our society compiled a dessert cookbook and these are being sold this year with the total proceeds going to our national scholarship fund. We have several new committees this year that are of prime concern. Medical Assisting Careers, Safety, Past Presidents Service Project and History, and they are just what the name implies. Of course, EDUCATION and Membership are always foremost in everyone's mind and we work hard on these two things.

Our sincere thanks to YOU — Michigan State Medical Society — for letting us use your building in East Lansing for our meetings; for providing us the services of Mrs. Jackie Van Deventer (who is terrific); for your continuing support and assistance.

Our goal this year is: "You and Your Society — Working Together Harmoniously".

12. Remarks by Robert H. Hamburg, MD, Chairman of the Michigan Blue Shield

(The following report was presented in written form.)

Mr. Speaker, Delegates and distinguished guests, I am happy to be here. I had not anticipated an invitation to appear before you at this meeting. The surprise, however, does not dull my gratitude for the invitation. I choose to interpret your request as an expression of continued interest in the affairs of Michigan Blue Shield and hope for the continued success of the corporation whose destiny is so closely interwoven with that of the physicians in Michigan.

Because of the alteration in the nature of our relationship my remarks today will not constitute an official report from Michigan Blue Shield but will be more in the nature of a friendly visit with my associates and peers.

The annual report of Michigan Blue Shield is the primary reporting technique to the corporate body, to the subscribers and subscriber groups and to the providers of care. The 1970 Annual Report has been distributed to all physicians in Michigan but additional copies are available here for those who wish to have them. I would like to make some summary comments from that report.

1970 was a very significant year sociologically, economically and administratively for Michigan Blue Shield. Sociologically, easily the most significant event of 1970 was the forward looking and responsible action taken by this House as the former Blue Shield corporate body. Your approval of the restructuring of the corporate body has led to greater opportunity for public and subscriber involvement in both the corporate body and the board of directors. I am happy to report that the "new" corporation and board of directors are functioning well and that the physician members of the board, despite being a minority, continue to be highly contributory.

Economically, 1970 provided both bad news and good news. The bad news — in September of 1970 we reached a reserve deficit of approximately $17,000,000. The good news — 1970 also was a time when major factors went into effect that have resulted in economic health for 1971. Needed rate increases provided greater income. An effective Cost Stabilization Program, the success of which was due to the splendid cooperation of the physicians in Michigan, resulted in savings of approximately five and a half million dollars. Finally, increased utilization review activity in the area of recovery and control brought about recoveries in excess of a million dollars and reduction in benefit payout for laboratory services of that much and more.

Administratively, 1970 was a significant year. New benefits were added for a large number of contracts and despite increasing claims receipts, improved management techniques led to improved claims processing and improved service. In addition, major steps in the development of a system of the 70's were taken to assure even further improvement.

In July of this year, we had the opportunity to meet with your Council and identify for them what we foresaw for the near future.

We feel that in the future there will be limited opportunity for rate increases and that increased government involvement in health care will limit our potential to expand our subscriber rolls. Despite these foreseeable limitations, we feel that in all respects, Blue Shield will continue to grow; as an example, we anticipate that we will continue to be a significant factor in the incomes of Michigan physicians — more than half a billion dollars is expected to be paid out in 1972 for both regular and government programs. In addition, we have committed ourselves to the continuing task of improving administration and lowering administrative costs.

The meeting with The Council provided the opportunity to discuss the most vital issue of the near future — that of controlling spiraling inflation in health care costs. While admittedly it is a difficult task to provide equity to the providers of service and economic protection for the subscriber at the same time, Michigan Blue Shield feels that it must accept this dual responsibility.

One of the elements of cost control is a damper on the rate of increase allowed in customary charge change requests. The doctors of Michigan are to be highly commended upon the restraint shown in 1971. Our experience in 1971 to date is that an average of 30 such requests are received per week. If this experience continues, we anticipate a total of approximately 1,600 requests for the year 1971. Since there are approximately 12,000 physician providers in the State of Michigan, this means that only 13% of the physicians are requesting customary fee increases in this period. The fact that we anticipated approximately 30% is ample evidence of the restraint being shown by Michigan physicians.

Our meeting with The Council also provided an opportunity to discuss another important factor in cost control — that of utilization review and control. We expressed our concern for the steady and rapid rise in the use of diagnostic services, particularly laboratory and X-ray procedures. This trend has been highlighted by the recent experience under the Federal Employees Program, with which you are all now familiar. We have pledged to making continuing improvement in our utilization review and control efforts; to this end we look to your state utilization committee as a source of advice and recommendation. In the last analysis, however, the key to the "reasonable use of benefits" particularly in the area of diagnostic procedures is the individual physician. Unless he exercises reasonable judgment as to the medical necessity for service, our efforts will continue to be "swimming against the current."

At this meeting you will be considering the report of your Relative Value Study Committee and possibly assorted resolutions relative to fee schedules and differentials. At our meeting with The Council, we indicated our very strong feeling that the usual, customary and reasonable approach represented an equitable, payment mechanism for physicians, that thoroughly reflected the market place, that had the capacity for adjustment consistent wih economic indicators and that represented the officially stated views of both AMA and MSMS, and had within it adequate potential for control if you and your associates work with us in an atmosphere of cooperation.

Finally, the meeting with the Council presented an opportunity to share with them our concerns about the vague concept known as "HMO" and to indicate our interest in your movement towards the development of a foundation. To the extent that such a movement provides the opportunity for stronger and more meaningful peer review, Blue Shield welcomes it. The real key to the effectiveness of the foundation in the area of peer review will be the proportion of physicians who commit to accept the judgments of the foundation in such a venture. If your efforts are no more successful than ours have been, the task of dealing with non-participants will continue to be a special problem for your foundation and for Michigan Blue Shield.

I think it can be accepted as a fact of life that MSMS and Michigan Blue Shield are going to continue in existence. I trust that you agree that our fates are interwoven. Practically, we recognize that your organization represents the vast majority of the providers of service to our subscribers. If only for this pragmatic reason, we must keep the communication lines open. We solicit your continued support.

REPORTS OF THE COUNCIL

13. Remarks of The Council Chairman — Ross V. Taylor, MD

At the Council meeting on October 3, The Council considered the following items:

Professional Liability Insurance

The Council considered the report of an ad hoc committee regarding malpractice insurance programs and approved a recommendation that there be a two-week delay in further action so that the Ben Stratton agency, which has served the Michigan State Medical Society well for the past 15 years, has a last opportunity to present a satisfactory malpractice insurance program. If the Ben Stratton agency is unable to do this after a two-week period, The Council recommended approval of a formal letter of intent authorizing the Johnson and Higgins insurance brokerage firm to develop the details of their program, presented in rough outline to The Council on September 15.

(Briefly, during a six-months period, this would authorize Johnson & Higgins to conduct a feasibility study and attempt to estimate the acceptance of such a program if offered. At that time, The Council will be able to look at the details of an MSMS-sponsored professional liability insurance program.)

Simultaneously, The Council is working on several fronts: 1) requesting the Insurance Commissioner to call a special conference on professional liability among the professions; 2) seeking legislative relief; 3) cooperating with a Joint House-Senate study committee; and 4) authorizing the study mentioned above which could result in an MSMS-sponsored malpractice insurance plan.

Planning and Priorities

The Council approved the report of the Planning and Priorities Committee which recommended the restructuring of the Committee on a broader base and authorized the revamping of the MSMS committee structure, including longer terms, rotation of chairmanship, expediting the reporting system through The Council and, in general, making the committee work more effectively.

The Council will operate with three standing committees: Finance, Legislative Policy, and Scientific and Educational Affairs. The latter name is to take the place of the County Societies Committee, since this new name more accurately reflects its concern with scientific and educational activities, as well as its continuing responsibility and concern for policies and relationships of the county societies.

It should be noted that The Council received permission from the House last year to implement certain structural changes on an interim basis as a test. The Council would like to continue this and in 1972 make the appropriate recommendations for Bylaws changes to officially authorize the Legislative Policy Committee and the Scientific and Educational Affairs Committee, as the standing committees of The Council, along with the Finance Committee. These recommendations would also take into consideration the results of the Phase II study.

The purpose of the Planning and Priorities Committee is to develop a plan for the activities of MSMS, recommend priorities according to the relative importance of each, taking into consideration the available resources of MSMS.

The Planning and Priorities Committee is to be appointed by The Council and be composed of representatives from The Council, the House of Delegates, the Council of Specialty Societies, and other members of MSMS.

Policy Manual

The Chairman of The Council had instructed staff to research the official records and develop a complete listing of existing MSMS policies approved by The Council and the House of Delegates. Staff has completed the work on the policy manual which will be printed and available in a looseleaf notebook for use of Councilors, Delegates and county societies. It is anticipated that this will have wide usage as a reference document and as such will be constantly revised and kept up to date.

MSMS Economic Surveys

The Bureau of Economic Information, created by the House of Delegates last year, has completed 1) a survey of the increased costs of practice, and 2) a state-wide fee survey. (For details, please see the Annual Report of the Council.)

The survey of overhead costs indicates that the MSMS position is true, that costs of practice have increased more rapidly than revenues. The survey of fees so far confirms the validity of the Relative Value Study on a statewide basis.

The Council has received preliminary reports and a full analysis is still under development. However, some preliminary observations on the costs of practice survey have been distributed to you.

New Peer Review Organization — Medical Programs, Inc.

The Committee on Utilization Review and Health Insurance Problems, under the chairmanship of Doctor Robert Prophater, presented a special report to The Council.

The Council approved the recommendation that The Council proceed with the incorporation of a peer review organization called Medical Programs, Inc., subject to approval by the House of Delegates. The Bylaws have been drafted and amended by The Council and will be available to the reference committee and delegates.

Amendments to the Bylaws approved by The Council include provisions 1) that six members of the Board of Trustees be elected by the members of MSMS who are participating in the organization and 2) a majority of the members participating in the organization could rescind any action of the Board of Trustees of the Corporation. It is important to remember that Medical Programs, Inc., will be established to carry out peer review mechanisms and is not the establishment of a foundation to contract to supply medical care. (See Addendum for report of committee.)

In the discussion of peer review mechanisms The Council reviewed the action of the AMA House of Delegates in June, 1971, when the AMA delegates adopted three definitions of peer review:

> "Peer Review: Evaluation by practicing physicians of the quality and efficiency of services ordered or performed by other practicing physicians. Peer review is the all-inclusive term for medical review efforts. Medical practice analysis; inpatient hospital and extended care facility utilization review; medical audit; ambulatory care review; and claims review are all aspects of peer review.
>
> "Medical Practice Analysis: A function of the medical society, or other organization authorized by the medical society, designed to coordinate all peer review efforts of a community. Medical practice analysis focuses on the development and application of criteria for optimal medical care, and evaluates the individual and collective quality, volume, and cost of medical care, wherever provided.
>
> "Claims review: Peer evaluation and adjudication of claims questions referred for peer review by any party with a valid interest in the case."

Expansion of Communications Staff

The Council took action to approve the addition of a fulltime assistant in the Communications Department to increase MSMS service to the members and the media, especially in the metropolitan areas. This is a part of the continuing responsibility of The Council to organize the staff in the most efficient manner.

Councilor Conferences

The Councilors reported individually on their conferences. It was generally agreed that the conferences were extremely valuable and that the staff had provided outstanding service at each of the Councilor conferences.

Addendum: Special Report to The Council Committee on Utilization Review and Health Insurance Problems

Robert C. Prophater, MD, Chairman, September 22, 1971

As authorized by the House of Delegates and directed by The Council on September 15, 1971 the Committee in consultation with MSMS Legal Counsel has prepared the Articles of Incorporation and Bylaws for the proposed MSMS Foundation that was authorized by Resolution 100 of the 1970 House of Delegates. These documents are appended to this report. Several councilors have reported that this matter was discussed at their councilor conference and presented below are answers to the most frequent questions raised by delegates.

1. What is a Foundation?

   The word "Foundation" has no universally accepted definition and their purposes, structures, etc. vary. Generally a "Foundation for Medical Care" is a separate corporation sponsored by a state or county medical society. Some foundations offer peer review services to insurance carriers and governmental agencies and are usually referred to as the "Hennepin" or "Missouri" type. Others also perform claims processing and pay claims, and are referred to as the "San Joaquin" or "California" type.

2. What type of "Foundation" is being proposed for MSMS?

   The primary function of the proposed MSMS Foundation will be peer review and it will not operate as an insurance carrier nor will it process claims. It is closely modeled after the Health Care Foundation of Missouri, which is controlled jointly by the governing boards of both the Missouri State Medical Association and the Missouri Association of Osteopathic Physicians and Surgeons. The Michigan Foundation's corporate body and board of Trustees will be composed of both MDs and DOs on a basis proportionate to each group's percentage of total physicians in the state.

3. Why is it necessary for MSMS to form a Foundation to do peer review when MSMS already has a peer review program in existence?

   The proposed MSMS Foundation will have the added capacity to contract with insurance carriers and governmental agencies. Moneys received can be used to compensate physicians and to hire necessary staff without jeopardizing the Michigan State Medical Society's tax-exempt status. The New Mexico Foundation is now doing peer review for the State of New Mexico's Medicaid program, and the Florida Foundation has signed an agreement to provide peer review services for Blue Shield of Florida, Inc. Both Michigan Blue Shield and the Michigan Department of Social Services have indicated verbally a willingness to discuss the possibilities of contracting for peer review services with a MSMS sponsored Foundation.

4. How will the Michigan Foundation operate?

   It is envisioned that the Michigan Foundation will perform peer review on a statewide basis through regional centers patterned after existing MSMS Regional Medical Advisory Committees. Component society committees charged with peer review responsibilities will be utilized by the regional centers much in the same fashion as they now function.

5. What are the advantages of including the Osteopaths?

   HR1, which passed the House of Representatives on June 22, 1971, contains a provision which authorizes experimentation with various forms of peer review. Additional peer review amendments will probably be added in the Senate. The joint MD/DO Foundation should give MSMS and the Osteopathic Association a viable organization that can qualify to perform required peer review under government financed medical care programs.

6. Will the Foundation become an insurance company?
   No. The Bylaws are written so as to preclude acceptance by the Insurance Commissioner as an insurance company.

RECOMMENDATION ONE: That The Council proceed with the incorporation of the MSMS foundation, "Medical Programs, Inc.," on approval by the House of Delegates.

ARTICLES OF INCORPORATION

(Non-Profit)

These Articles of Incorporation are signed and acknowledged by the incorporators for the purpose of forming a non-profit corporation under the provisions of Act No. 327 of the Public Acts of 1931, as amended, as follows:

ARTICLE I.

The name of the corporation is MEDICAL PROGRAMS, INC.

ARTICLE II.

The purpose or purposes for which the corporation is formed are as follows:

To promote, develop and encourage the distribution of high quality medical services to the people of the State of Michigan; to preserve for the health care professions and the public freedom of choice of both physician and patient, and to preserve the physician-patient relationship, to protect the public health; to establish a peer review mechanism for health care to assure the Michigan public of optimum of use of its health care expenditures; to work in cooperation with those prepaid medical care plans which provide for periodic and realistic budgeting for medical care and which subscribe to and provide for the freedom of selection and the guarantee of the physician-patient relationship in order to promote the purposes of this foundation; to provide an organization through which the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons, Inc., and their component county associations, may, without loss of identity or autonomy, promote their purposes and the purposes of this organization;

and, in general, to carry on any activity in connection therewith and incident thereto not forbidden by the laws of the State of Michigan and with all the powers conferred upon non-profit corporations by the laws of the State of Michigan.

BYLAWS OF MEDICAL PROGRAMS, INC.

ARTICLE I

Name

This corporation shall be known as Medical Programs, Inc. It shall be incorporated under that name as a non-profit, non-stock corporation in accordance with the laws of the State of Michigan.

ARTICLE II

Purposes

SEC. 1 This corporation shall be conducted not for profit. All of the income, revenue and earnings of this organization shall be held, managed, used and expended to carry out the objects of the organization and without profit to any member. No member, trustee or officer of the corporation or other private individual shall be entitled to share in the distribution of any of its assets upon liquidation or dissolution. However, nothing herein contained shall be construed to prevent a distribution of the properties of the corporation to another distributee, otherwise properly made in accordance with the provisions of these Bylaws and the purposes herein stated, solely by reason of the fact that one or more of the members, trustees or officers of this corporation may be connected with or associated with the distributee as a shareholder, member, trustee, director, officer, or in any other capacity.

SEC. 2 The objects for which this corporation is founded are: To promote, develop and encourage the distribution of high quality medical services to the people of the State of Michigan; to preserve for the health care professions, and the public, freedom of choice of both physician and patient, and to preserve the physician-patient relationship; to protect the public health; to establish a peer review mechanism for health care to assure the Michigan public of optimum of use of its health care expenditures; to work in cooperation with those prepaid medical care plans which provide for periodic and realistic budgeting for medical care and which subscribe to and provide for the freedom of selection and the guarantee of the physician-patient relationship in order to promote the purposes of this corporation; to provide an organization through which the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons, Inc., and their component county associations, may, without loss of identity or autonomy, promote their purposes and the purposes of this organization; and, in general, to carry on any activity in connection therewith and incident thereto not forbidden by the laws of the State of Michigan and with all the powers conferred upon non-profit corporations and the laws of the State of Michigan.

SEC. 3 The work of the corporation shall be carried on and all funds of the organization shall be used and applied exclusively for charitable, scientific, literary or educational purposes, and in such manner that no part of such funds will inure to the benefit of any member, officer or trustee of this corporation or any other corporation, organization, foundation, fund or institution or any other individual; except that reasonable compensation may be paid for services rendered to or for this corporation in furtherance of one or more of its purposes and except that individuals may benefit from grants, scholarships, fellowships and similar payments or contributions made for charitable, scientific, literary or educational purposes in furtherance of the purposes of this corporation. The corporation shall not engage, other than as an insubstantial part of its total activities, in activities that in themselves are not in furtherance of one or more of the exempt purposes as specified in Section 501 (c) (3) or (6) of the Internal Revenue Code of 1954, as amended. No part of the assets or income of the corporation shall be paid or contributed to any other corporation, organization, foundation, fund, institution or governmental body, any substantial part of the activities of which consist of carrying on propaganda or otherwise attempting to influence legislation or which participate or intervene in any political campaign.

ARTICLE III

Membership

SEC. 1 There shall be three classes of membership in this corporation: Administrative members, participating members and cooperating members.

SEC. 2 Administrative members shall consist of: The President, President-elect and Immediate Past President of the Michigan State Medical Society. The Speaker of the House of Delegates of the Michigan State Medical Society; the Chairman and Vice Chairman of The Council of MSMS and six other members of the Michigan State Medical Society elected by members of MSMS who participate in this corporation; the President, President-Elect, Immediate Past President of the Michigan Association of Osteopathic Physicians and Surgeons, Inc.; and three other members of the Michigan Association of Osteopathic Physicians and Surgeons, Inc. who shall be selected annually by participating members of MAOPS. Every person upon becoming one of the above officers or designees shall be entitled to become, and shall without any further action or proceeding, be an administrative member of this corporation. Whenever an administrative member ceases for any reason to hold one of the above offices, his administrative membership herein shall immediately and automatically terminate. Acceptance of election to one of the above offices shall be deemed to be acceptance of an administrative membership in this corporation.

SEC. 3 The privilege of voting shall vest in and be held and enjoyed by the administrative members only; and each administrative member shall be entitled to one vote on all propositions submitted to the members.

SEC. 4. Any licensed physician who is a member in good standing in the Michigan State Medical Society or the Michigan Association of Osteopathic Physicians and Surgeons, Inc. is eligible to be a participating member of this corporation. The dues to be charged to participating members shall be determined by the Board of Trustees. Members' dues may be paid by the Michigan State Medical Society and by the Michigan Association of Osteopathic Physicians and Surgeons, Inc. or such dues may for convenience be billed to the members by including same upon the dues invoices of those two societies.

SEC. 5 Participating members shall have the privilege of holding any office and the privilege of membership on any committee. A majority of the participating members may rescind any action of the Board of Trustees of the corporation.

SEC. 6 Any person who is regularly engaged in any facet of the health care field or in any paramedical activity and who is interested in promoting the purposes of this organization shall be eligible to apply for a cooperating membership. A cooperating membership may be granted by the Board of Trustees to any such person so qualified who has made appropriate application therefor. The rights and privileges of cooperating members shall be the same as those of participating members. The dues to be charged to cooperating members shall be determined by the Board of Trustees.

ARTICLE IV

Meeting of Members

SEC. 1 The annual meeting of administrative members of the corporation for the election of the Board of Trustees and for transacting such other business as may properly come before the meeting shall be held each year during the month of June. The day, hour and place of the annual meeting shall be set by the Chairman of the corporation. If the Chairman fails to act, the meeting shall be set by the Board of Trustees. Participating members and cooperating members may attend the annual meeting, without vote.

SEC. 2 Special meetings of the administrative members for any purpose may be called at any time by the Chairman or by a majority of the Board of Trustees. They may be held at the same time and place as the meetings of The Council of the Michigan State Medical Society or the Board of Trustees of the Michigan Association of Osteopathic Physicians and Surgeons, Inc., at the option of the Chairman.

SEC. 3 All meetings of administrative members shall be held within the State of Michigan and shall be held at such location as may be specified in the notice of meeting.

SEC. 4 Notice of the annual meeting of administrative members shall be given to each administrative member, participating member and cooperating member. Notice of each special meeting shall be given to each administrative member not less than five (5) nor more than thirty (30) days before the date on which the meeting is to be held, by delivering a written notice thereof to him personally or by posting such notice in an envelope addressed to him at his post office address of record with the corporation with sufficient postage attached thereto. Every notice of a special meeting besides stating the time and place of the meeing, shall state briefly the purposes thereof. No notice of any adjourned meeting of administrative members shall be required to be given. Meetings may be held at any time without notice if all of the administrative members are present or if those not present waive notice of such meeting in writing, either before or after the holding thereof.

SEC. 5 At each annual meeting or regular meeting of administrative members and at any and all adjournments thereof, any business of whatsoever character other than Amendment of Corporate Articles or these Bylaws may be transacted, whether or not such business is stated in the call for such meeting or in a waiver of notice thereof.

SEC. 6 At all meetings of administrative members, a majority of the administrative members shall be present to constitute a quorum for transacting business. The act of a majority of the administrative members present at a meeting at which a quorum is present shall be the act of the administrative members, except as set forth in Section 6 of Article V hereof. In absence of a quorum, a majority of those present may adjourn the meeting from time to time. At any such adjourned meeting at which a quorum may be present any business may be transacted which might have been transacted at the meeting as originally called.

SEC. 7 At every meeting of administrative members, the Chairman, or in his absence, the Vice Chairman, or in the absence of each of them, the President of the Michigan State Medical Society or the President of the Michigan Association of Osteopathic Physicians and Surgeons shall act as chairman. The chairman of the meeting may appoint any person as secretary of the meeting.

SEC. 8 At each meeting of administrative members, every administrative member shall be entitled to one vote upon all matters, including the election or removal of Trustees. Cumulative and proxy voting are expressly prohibited.

SEC. 9 Any action that may be taken at a meeting of administrative members may be taken without a meeting if authorized in writing, signed by all of the administrative members who would be entitled to vote at a meeting.

ARTICLE V

Board of Trustees

SEC. 1 The property, affairs and business of the corporation shall be managed by the Board of Trustees.

SEC. 2 The first Trustees designated as such in the Articles of Incorporation of this corporation shall hold office and exercise all powers granted to the Board of Trustees until the first annual meeting of the administrative members. Thereafter, a new Board of Trustees shall be elected by the administrative membership in accordance with these Bylaws; the new Board of Trustees so elected may be composed of all, some, or none of the first Trustees. Three (3) Members of the Board of Trustees shall be elected for a period of three (3) years, three (3) for a period of two (2) years and three (3) for a period of one (1) year; thereafter, three (3) new members shall annually be elected to the Board of Trustees for a period of three (3) years. Participation in the activities of this corporation as an administrative, participating or cooperating member is a qualification for the office of Trustee and eligibility is expressly limited by Section 4 of this Article V.

SEC. 3 At the second annual meeting of the administrative members for the election of Trustees, and at each annual meeting thereafter, the three (3) persons receiving the greatest number of votes shall be elected Trustees for a period of three (3) years. All elections of trustees shall be by ballot.

SEC. 4 There shall be not less than six (6) participating members of the Michigan State Medical Society nor less than three (3) participating members of the Michigan Association of Osteopathic Physicians and Surgeons on the Board of Trustees.

SEC. 5 Any Trustee may resign at any time by giving written notice thereof to the Chairman. Such resignation shall take effect at the time specified therein or, if the time be not specified, upon receipt thereof. Unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

SEC. 6 Any Trustee may be removed from office by the affirmative vote of two-thirds (⅔rds) of all the administrative members then so serving, or two-thirds (⅔rds) vote of all the Trustees then so serving, at any special meeting of the members or the Board of Trustees called for such purpose; the call and notice for such a meeting shall set forth the reasons and grounds therefor and shall be delivered to such Trustee at least twenty (20) days prior to the date of such meeting.

SEC. 7 Any vacancy on the Board of Trustees because of death, resignation, or removal may be filled by the remaining Trustees at any meeting of the Board of Trustees until the next annual meeting of administrative members.

SEC. 8 Meetings of the Board of Trustees shall be held at the principal office of the corporation, or at such other place or places within or without the State of Michigan as may from time to time be determined by a majority of the Board of Trustees. An annual meeting of the Board of Trustees shall be held at the same location as, and immediately following, the annual meeting of the administrative members. Special meetings may be held at any time upon the call of the Chairman or not less than three (3) of the Trustees then in office.

SEC. 9 Written notice of the time and place and principal purposes of every meeting of the Board of Trustees shall be duly served on or sent, mailed or telegraphed to each Trustee not less than 10 days before the meeting, except that the annual meeting of the Board of Trustees may be held without notice immediately after the annual meeting of the administrative members of the corporation at the same place as such meeting was held, for the purpose of electing and appointing officers for the ensuing year as well as transacting such other business as may come before the meeting. No notice of an adjourned meeting need be given. Meetings may be held at any time without notice if all of the Trustees are present or if those not present waive notice of such meeting in writing, either before or after the holding thereof.

SEC. 10 A majority of the Trustees in office at the time of any meeting of the Board of Trustees shall be present in person at such meeting to constitute a quorum for transacting business. The act of a majority of the Trustees present at such a meeting, at which a quorum is present, shall be the act of the Board of Trustees, except as set forth in Section 6 of this Article V. In absence of a quorum, a majority of those present may adjourn the meeting from time to time until a quorum be had. The Trustees shall act only as a Board and the individual Trustees shall have no powers as such. If the Trustees shall severally and/or collectively consent in writing to any action to be taken, such action shall be a valid corporate action as though it had been authorized at a meeting of the Board of Trustees.

SEC. 11 The members of the Board of Trustees may be paid such fees and compensation for their services and may be reimbursed such expenses as the administrative members may from time to time determine.

SEC. 12 The chief staff employee of the corporation and the chief staff employee of the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons, Inc. shall be requested to attend all meetings of the Board of Trustees and shall receive notice of all meetings, but shall not have the right to vote unless he or they also hold other voting positions provided for in these Bylaws.

ARTICLE VI

Officers

SEC. 1 The officers of the corporation shall be a Chairman, a Vice Chairman, a Treasurer, an Executive Secretary and such other officers as the Board of Trustees may designate. No two offices may be held by one person. Officers may be either administrative, participating, or cooperating members of the corporation. An officer may be elected to succeed himself.

SEC. 2 The officers of the corporation shall be elected annually by the Board of Trustees. Each officer shall hold office until his successor shall have been duly elected, or until his death, resignation or removal.

SEC. 3 The Chairman of the corporation shall be a Trustee and shall be the chief executive officer of the corporation. Subject to control of the Board of Trustees, he shall have general and active management, direction and supervision over the business of the corporation and over its several subordinate officers. He shall preside at all meetings of administrative members and meetings of the Board of Trustees. He shall be an exofficio member of all standing committees, if any, and shall have the general powers and duties of management usually vested in the office of the president of a corporation. The Chairman shall have such other powers and duties as may be assigned to him by the Board of Trustees. The Chairman is authorized to sign all contracts, orders, mortgages, pledges, deeds, licenses, and other instruments of a special nature. He shall fix the salary of all employees other than officers and shall perform all other duties pertaining to his office, without special authorization of the Board of Trustees, provided that such actions are not contrary to the express instructions of the Board of Trustees.

SEC. 4 At the request of or in the absence or disability of the Chairman, the Vice Chairman shall perform all the duties of the Chairman and when so acting shall have all the powers of and be subject to all the restrictions upon the Chairman. The Vice Chairman is not required to be a Trustee but a Vice Chairman who is not a Trustee cannot succeed to the office of Chairman. The Vice Chairman shall have such other powers and shall perform such other duties as from time to time may be prescribed by the Chairman or the Board of Trustees.

SEC. 5 The Treasurer shall have custody of all funds of the corporation and shall keep in books belonging to the corporation, full and accurate accounts of all receipts and disbursements; he shall deposit all moneys, securities and other valuable effects in the name of the corporation in such depositories as may be designated for that purpose by the Board of Trustees. He shall disburse the funds as may be ordered by the Board, taking proper vouchers for such disbursements and shall render to the Chairman and the Board of Trustees at the regular meetings of the Board, and whenever required by them, an account of all of his transactions as Treasurer, and of the financial condition of the organization. The payment of any and all taxes shall be the sole responsibility of the Treasurer. If required by the Board of Trustees, he shall deliver to the Chairman, and shall keep in force, a bond in the form, amount and with the surety or sureties satisfactory to the Board, conditioned for the faithful performance of the duties of his office and for restoration to the corporation in case of his death, resignation, or retirement or removal from office, of all books, papers, vouchers, money and property of whatever kind in his possession or under his control belonging to the corporation. The Treasurer may delegate any of his functions to an Assistant Treasurer and may delegate any of his administrative duties to the Executive Secretary.

SEC. 6 The Executive Secretary shall be the Chief administrative officer of the corporation. He shall be a person who is a staff member of Michigan State Medical Society or Michigan Association of Osteopathic Physicians and Surgeons, Inc. He shall manage its affairs and activities, under the supervision of the Board of Trustees and the Chairman. The duties of the Executive Secretary shall consist of the following; among others:

1. He shall cooperate with and be Recording Secretary of all committees;

2. He shall handle all correspondence not otherwise specifically handled by the officers;

3. He shall record and keep the minutes of all meetings of the administrative members and of the Board of Trustees;

4. He shall prepare and tender the required written notices of all meetings;

5. He shall have custody of the books of the corporation subject to the Treasurer's need therefor, and shall maintain a roster of the administrative members, participating members and cooperating members;

6. He shall be responsible for the collection of all assessments;

7. He shall keep a correct account of all moneys coming into his possession and handle the same as instructed by the Treasurer and the Board of Trustees;

8. He shall be responsible for the routine of his office and the employment of such assistants as may be authorized;

9. He shall encourage members and the public to utilize the various aids and services provided by the corporation; and

10. In general, he shall promote and make effective the objects for which this organization was formed.

In addition to those duties enumerated herein, the Executive Secretary shall perform such other duties as the Chairman and the Board of Trustees may require of him.

SEC. 7 The Board of Trustees may appoint such other officers, committees or agents as the business of the corporation may require. It shall continuously retain experienced insurance counsel and legal counsel experienced in medical counseling.

SEC. 8 Any officer may be removed either with or without cause by vote of the majority of all of the Trustees then so serving, at any meeting of the Board called for or noticed for such purpose.

SEC. 9 Any officer may resign at any time by giving written notice thereof to the Board of Trustees or to the Chairman. Any such resignation shall take effect at the time specified therein; and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

SEC. 10 Any vacancy in any office because of death, resignation, removal, disqualification or other cause shall be filled for the unexpired portion of the term by the Board of Trustees.

SEC. 11 Salaries of officers shall be fixed from time to time by the Board of Trustees. No officer shall be prevented from receiving such salary by reason of the fact that he is also a Trustee.

ARTICLE VII

Executive Committee and Other Committees

SEC. 1 There shall be an Executive Committee composed of the Chairman, Vice Chairman and the Executive Secretary. Such Executive Committee shall be vested with all the powers of the Board of Trustees while the Board of Trustees is not in session.

SEC. 2 It shall be the duty of the Chairman at the first meeting in each year of the newly constituted Board of Trustees to select from the total membership of the corporation, individuals to serve on standing committees:

a. Membership Committee
b. Peer Review Committee(s)
c. Utilization Committee(s)
d. Contracts Committee(s)
e. Other Standing Committees

The members of these committees shall be appointed by the Chairman, subject to the approval of the Board of Trustees, and shall hold office for a period of one year. Cooperating members shall not be appointed as chairmen of any standing committee. Each standing committee shall have as many members thereon as the Board of Trustees may from time to time determine and shall have such duties and shall perform such functions as may be required of them by the Board of Trustees. Insofar as is practicable, the ratio of members as between the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons, Inc., on the Board of Trustees shall be maintained as the ratio of members on each such committee.

SEC. 3 The standing committees shall be the principal mechanisms for effectuation of the corporation's purposes as set forth in Article II hereof. Such committees may be subdivided functionally and geographically into sub-committees. Standing committees are empowered to delegate functions, with the coordination and assistance of the Executive Secretary, to appropriate county and local agencies and organizations; provided however, that no committee may enter into contracts binding the corporation, such contractual rights being expressly reserved in these Bylaws to the Board of Trustees, and the Chairman. Within the judgment of the Board of Trustees, such committeemen can be paid appropriate fees for their services and reimbursement for their expenses. The Trustees shall provide the committees with such clerical and staff assistance as may be needed.

SEC. 4 The Board of Trustees may from time to time create such other standing and special committees, the members of which shall be selected and appointed as in the foregoing section. The Board shall invest said committees with such powers and duties as it deems desirable.

ARTICLE VIII

Miscellaneous

SEC. 1 All checks, drafts and orders for payment of money shall be signed in the name of the corporation by such officers or agents as the Board of Trustees shall from time to time designate for that purpose.

SEC. 2 When the execution of any contract, covenant or other instrument has been authorized without specification of the executing officers, the Chairman or Vice Chairman and the Treasurer may execute the same in the name and on behalf of the corporation. The Board of Trustees shall have the power to designate the officers and agents who shall have the authority to execute any instrument.

SEC. 3 The membership roll, the books of accounts, the minutes of proceedings of meetings of members and Board of Trustees shall be open to inspection upon the written demand of any administrative or participating member at any reasonable time if for a purpose reasonably related to his interest as such member, and shall be exhibited at any time when required by written request of 10% of the administrative or participating members. Demand of inspection other than that at a members meeting shall be made in writing upon the Chairman.

SEC. 4 The Board of Trustees shall cause to be sent to the members not later than 120 days after the close of the fiscal year, an annual report of the financial affairs of the corporation. This requirement may be satisfied by publication in the official journals of the Michigan State Medical Society and the Michigan Association of Osteopathic Physicians and Surgeons, Inc.

SEC. 5 The corporation shall keep in its principal office a true copy of the Bylaws, as amended, which shall be open to inspection by members at reasonable times during office hours.

SEC. 6 Roberts' Rules of Order shall be the parliamentary guide for all meetings when not in conflict with these Bylaws.

SEC. 7 The Principles of Medical Ethics of the American Medical Association (as to those members who are medical doctors) the Code of Ethics of the American Osteopathic Association (as to those members who are osteopathic physicians) and such principles of professional conduct as this corporation may adopt by a majority vote of its administrative members shall govern the organization and all members thereof.

SEC. 8 A member who is guilty of a criminal offense, gross misconduct, either as a physician or citizen, or who violates any of the provisions of these Bylaws, or any provisions of the Principles of Medical Ethics of the American Medical Association (as to those members who are medical doctors), the Code of Ethics of the American Osteopathic Association (as to those members who are osteopathic physicians) or any principles of professional conduct adopted by this corporation, or who acts contrary to or in violation of any contracts, agreements, statements of principle of this organization shall be liable to censure, suspension or expulsion. The procedure to be followed with respect to censure, suspension or expulsion of a member shall be the procedure now or hereafter contained or provided in the Bylaws of the Michigan State Medical Society or the Michigan Association of Osteopathic Physicians and Surgeons, Inc., (whichever shall apply), as they now exist or as they may be hereafter amended; said procedures are hereby incorporated into these Bylaws by this reference; provided, however, if this corporation does not have a committee to hear disciplinary matters, the hearing body shall be the Board of Trustees.

ARTICLE IX

Indemnification

Each person who is a trustee or officer of this corporation shall be indemnified by it from and against costs and expenses sustained or incurred by him in connection with any action, suit or proceeding in which he may be a party by reason of his being or having been a trustee or officer of the corporation, except in relation to matters as to which he shall be adjudged in such action, suit or proceeding to be liable for negligence or misconduct in the performance of his duty as such trustee or officer. The foregoing right of indemnification shall not be exclusive of other rights which a trustee or officer may be entitled to as a matter of law.

ARTICLE X

Amendment of the Bylaws.

These Bylaws may be amended, altered, changed, added to or repealed by the affirmative vote of a majority of the administrative members present and entitled to vote at any meeting of the administrative members if notice of the proposed amendment, alteration, change, addition or repeal be contained in the notice of the meeting, or by the affirmative vote of a majority of the Board of Trustees if the amendment, alteration, change, addition or repeal be voted at a meeting of the Board and adopted at a subsequent meeting of the administrative members.

THE REFERENCE COMMITTEE on Reports of Council and Officers, Herbert W. Harris, MD, Chairman, made the following report:

> "Mr. Speaker, your Committee next considered the Annual Report of The Council of MSMS. We were privileged to have present for explanation and clarification the Chairman and several other members of The Council. The Committee would like to mention the evident great load of work done by The Council in the past year. The matter of professional liability insurance is especially important at the present time. Your Committee is informed that some doctors beginning practice in this state are unable to obtain liability insurance from our present carrier, if they propose to practice alone. We are pleased to find that The Council is actively studying this matter and propose that another carrier be obtained if the problem is not solved."

THE HOUSE approved this portion of the report of the Reference Committee.

THE HOUSE then amended and approved the following portion of the report of the Reference Committee on Reports of Council and Officers, Herbert W. Harris, MD, Chairman:

> "Mr. Speaker, your Committee next considered the Special Report to The Council of the Committee on Utilization Review and Health Insurance Problems.
>
> "The Committee would like to remind the House of Delegates of Resolution 100 which was referred to The Council at the meeting last year.
>
> "The resolved portion of that Resolution was 'MSMS Council investigate the desirability of forming a Medical Foundation in Michigan and, if found desirable, take the necessary steps for forming such a Foundation.'
>
> "The Council investigated the formation of such a Foundation as directed and appointed an ad hoc committee, chaired by Robert C. Prophater, MD, to study and implement this directive. The report of this committee has been reviewed by The Council and as a part of their report has been presented to your Committee.
>
> "Your Committee has carefully considered this report and has had the benefit of a great many leaders of this Society, including the President, the President-elect, the Chairman of The Council, and many members of The Council as advisors.
>
> "In the interest of clarity, we would suggest a definition of Peer Review be established, the definition of the AMA as follows:
>
> > 'Peer Review: Evaluation by practicing physicians of the quality and efficiency of services ordered or performed by other practicing physicians. Peer review is the all-inclusive term for medical review efforts. Medical practice analysis; inpatient hospital and extended care facility utilization review; medical audit; ambulatory care review; and claims review are all aspects of peer review.'
>
> "Your Committee suggests that the activity of the proposed Foundation be strictly limited to Peer Review as defined above, if subsequently adopted by MSMS.
>
> "Your Committee suggests that the Articles of Incorporation and Bylaws of the proposed Foundation, as submitted, should be reviewed and revised to better reflect and define the purposes and needs of this Society.
>
> "In revision of this instrument, your Committee suggests consideration to the following:
>
> 1. MEMBERSHIP—All members of MSMS automatically become members of the Foundation. Any other physician licensed to practice medicine in the State of Michigan may become a participating member of the Foundation on written application.
> 2. COST—There should be better definition of the cost of establishing and mainatining this Foundation, and a definition of the source of necessary funds.
> 3. APPEAL MECHANISM—Mechanism of appeal from action of the Officers of the Foundation to be incorporated by the Bylaws.
> 4. PEER REVIEW—We believe the Bylaws should include a clear definition of the methods by which Peer Review will be carried out.
> 5. CLASSES OF MEMBERS—We question the propriety and need for Article III, Section 6.
> 6. AMENDMENT OF BYLAWS—We suggest Article X of the Bylaws should be revised to allow a greater voice from the participating membership.
> 7. The Bylaws should provide a mechanism for dissolution of the Foundation.
>
> "Your Reference Committee finally recommends that this proposal for a Medical Foundation be returned to The Council for revision as suggested above and for other changes as may appear indicated.
>
> "We further recommend that after this revision is done by The Council that a copy of the revised instrument be sent to each delegate to aid him in informing his Society members of the provisions of this Foundation.
>
> "We further recommend that each delegate be requested to promptly submit to The Council any suggestions for further change.
>
> "We recommend that a special meeting of the House of Delegates of MSMS be called by the Speaker to consider and, we hope, adopt the final version of the instrument of this proposed Foundation.
>
> "Your Committee would like to suggest that this is a far reaching proposal which should be carefully studied before adoption."

14. Report of Council Activities

PART I

These pages report the highlights of The Council's work during 1970-71 in the usual ongoing areas of MSMS service, such as legislation, communications, and postgraduate medical education.

In Part I, The Council comments on some general activities. Detailed reports are unnecessary since minutes of The Council's meetings are mailed regularly to Delegates and component medical society leaders, and abstracts of Council actions appear regularly in *Michigan Medicine*. Delegates or county officers with questions about items that follow are urged to contact their MSMS Councilor or the MSMS staff.

MSMS Membership

Membership in MSMS on December 31, 1970, stood at 8,062 — a record figure. The gain over the previous year was modest, but many other professional societies are experiencing declining membership. The June 1971 membership is virtually the same as the June 1970 figures. Following are the MSMS membership figures:

Year	June 30	December 31
1935	3410	3543
1945	4425	4686
1955	5503	6109
1960	6660	6715
1965	7247	7563
1970	7643	8062
1971	7645	—

Finances

Income and expense estimates for 1971 are going much according to plan. The cost of doing business has increased, as expected, over the 1970 budget, but cost control efforts have been remarkably successful.

Exhibit income is down in 1971, for two reasons at least:

1) The meeting is being held in Grand Rapids, and 2) there is still a national decline in exhibitors' medical meetings. This is principally due to decreased emphasis on the part of pharmaceutical houses on this form of physician contact.

In the first seven months of 1971, advertising income from *Michigan Medicine* has held up to expectations; apparently the downward trend over the past several years has been reversed in Michigan; and 1971 income will surpass that of 1970. Journal printing costs also have increased.

The Council, at the instruction of the 1970 House of Delegates, has created a Bureau of Economic Information funded by a specific dues increase and this is separately budgeted and funded within the overall budget of MSMS.

Following is a balance sheet for the eight-month period ending July 31, 1971. It shows the status of our assets and liabilities and the resulting Members' Equity. The investments funds will be described in detail in the Treasurer's report.

BALANCE SHEET
July 31, 1971

CURRENT ASSETS		
Cash	$184,184	
Accounts Receivable	18,103	
Pension Trust & Due from Employees	10,220	$ 212,507
INVESTMENTS IN SHORT TERM SECURITIES		338,760
INVESTMENTS IN FUNDS		
Capital Reserve Fund*		250,280
Capital Protection Fund**		430,448
FIXED ASSETS		
Building	$ 606,235	
Furn. & Equip.	103,559	
Less: Accumulated Depreciation	153,863	555,931
Land		75,971
OTHER ASSETS		
Time Certificates		
(Funded Obligations to Retired Exec. Dir.)		27,359
Prepaid Expense		882
		$1,892,138
*CAPITAL RESERVE FUND		
Securities		217,289
(Market Value $282,132-6/30/71)		
Demand Deposit (Savings)		1,711
Dividends on Deposit (Checking)		912
Real Estate (Frost)		33,987
		$ 253,899
**CAPITAL PROTECTION		
Securities		437,096
(Market Value $349,402-6/30/71)		
Dividends on Deposit (Checking)		1,058
Expense (audit)		800
		$ 438,954
CURRENT LIABILITIES		
Mortgage Payable (Mich. Nat'l Bank)		$ 621,729
Accounts Payable (Est.) (Includes AMA Dues)		30,000
Property & Other Taxes Payable (Est.)		7,750
Long Term Liability Retirement Fund (Wm. J. Burns)		26,600
Members' Equity (net worth)		1,206,059
		$1,892,138
Operational Fund Investment		250,280
(Original funds advanced in 1968 — $251,972)		
Income 1971		3,619
		$ 253,899
Operational Fund Investment		430,448
(Original funds advanced in 1968 — $375,000)		
Income 1971		8,506
		$ 438,954

Committee Activity

Last year The Council reported to the House of Delegates that it was making an overall review of its efforts, commitments and available resources via the activities of the Planning and Priorities Committee. Part of the concern of the Committee (See paragraphs regarding this for details) is an effort to streamline and revitalize the MSMS committee structure. At the September meeting, The Council will consider recommendations for restructuring the committee set-up which will improve and speed up communications between the committees and approving bodies.

Regarding the streamlining of committees, this is a more difficult situation because there are so many things going on at the same time. Planning and Priorities is looking at the purposes and objectives of committees. It has received from committee chairmen their views regarding the future purposes and objectives of the committees, and in addition, the Phase II study of the organization of MSMS will give guidelines for future committee activity because of the priorities placed upon various aspects of MSMS work by the membership participating in the organizational study.

Therefore, The Council is not making any recommendations at this time to the House for permanent change in the names and numbers of committees, but simply requests that the House permit The Council to continue on an experimental basis with the regrouping of some committees and that by-law amendments be postponed until the 1972 meeting of the House.

Planning and Priorities

The Council has instructed its Planning and Priorities Committee to be concerned with long-range planning efforts as well as immediate and short-range planning and priorities concerns. At the request of The Council, the Committee reviewed the time and place of the MSMS Scientific Session and the Annual Meeting of the House of Delegates and, by resolution, The Council is making a recommendation to the House for a change in the Annual House of Delegates Meeting from the fall to the spring with consideration of having two meetings a year.

As mentioned in the foregoing paragraph the committee reporting procedure is being restructured and The Council in September will consider a new and speedier method of approving Committee reports, giving the committees more latitude in working within approved guidelines and policies created by the House of Delegates and The Council.

Regarding The Council's structure, the Planning and Priorities Committee will present to The Council in September a recommendation that the standing committees of The Council be reviewed and updated to meet the needs of the times. Last year The Council reported to the House that, with House permission, extralegally it would create a Legislative Policy Committee as a standing committee of The Council and make the Publication Committee simply a committee of The Council. This year, the Planning and Priorities Committee is recommending that The Council, via a resolution, suggest that the County Societies Committee be renamed as a standing committee of The Council to read: Scientific and Educational Affairs. The Committee would still be responsible for matters pertaining to county medical societies, but the committee title changed to reflect its increased concern for scientific and educational matters.

In addition, The Council is studying the need to have the Education Liaison Committee as a standing committee of The Council as specified in the Bylaws and may recommend at some future date that this become a Council committee.

The Planning and Priorities Committee has many additional items on its agenda and as rapidly as possible will report to The Council on these important matters.

Peer Review and Foundations

The MSMS Peer Review Program developed in 1970 was further defined by guidelines covering the organization and procedures for county medical society committees charged with peer review responsibility and Councilor District Regional Medical Advisory Committees. These procedures have been transmitted to Blue Shield and the Health Insurance Council which represents commercial health insurers. Early reports indicate that these efforts have resulted in efficiencies that expedite the handling of cases for both carrier and physician.

The 1970 House of Delegates urged The Council to study the concept of foundations and if feasible to organize such a corporation. MSMS committees and staff surveyed existing foundations, made on-site visits and utilized the knowledge of outside organizations and committees such as the AMA Committee on Health Care Financing.

The Committee on Utilization Review and Health Insurance Problems was assigned the task of developing forms and content of any proposed foundation with the additional responsiblity of preparing purposes, objectives and corporate structure.

The preliminary report of the committee is that the immediate and primary function of any health review corporation (foundation) planned be peer review. Interest in such a service by the physician-member corporation has been evidenced by the Michigan Department of Social Services and insurance companies.

The final report of the Committee will be made to The Council on September 15, after which, the report, as amended and approved, will be forwarded as a special report to the House of Delegates.

Membership Services

New Member Benefits: Treasurer John Ylvisaker is seeking information on what additional services MSMS members want from their state society. Items to be considered include new insurance coverages, auto leasing programs, financial services, and so on.

Umbrella Liability Insurance: The Committee on Professional Insurance Plans reports that enrollment in the MSMS-sponsored Personal Prestige Policy, which provides excess liability coverage in amounts of $1,000,000 to $5,000,000, is growing rapidly after being in force for less than a year. A valuable advantage of the MSMS plan is the low requirement for basic professional liability insurance of $100,000/$300,000. Many plans purchased on an individual basis require $200,000/$600,000 limits; this often results in a higher cost for basic malpractice coverage that exceeds the amount paid in MSMS dues.

Basic Professional Liability Insurance: The Committee on Professional Insurance Plans has been monitoring the AMA efforts to reach an agreement with the CNA Insurance Group for the establishment of a sponsored Basic Professional Liability program. This initial agreement calls for CNA to offer insurance in certain selected states where there is a good chance for high physician participation because other companies have withdrawn coverage. The Council will hear a presentation from the AMA Insurance Division and Johnson and Higgins Insurance Consultants on September 15 to learn at first hand possible solutions to Michigan's professional liability insurance crisis.

In late July, Council Chairman Taylor wrote the Michigan Insurance Commissioner re the urgent need for action to help Michigan physicians who were unable to obtain professional insurance from any source. The Governor was also alerted to the problem. Results of this contact can be reported in The Council Chairman's verbal remarks to The House.

Health Insurance: Also, at the request of the Committee on Professional Insurance Plans, Michigan Hospital Service and Michigan Medical Service are developing new optional coverages containing both deductible and co-insurance features. These programs will be considered by the Committee just as soon as they are approved by the Insurance Commissioner and become available.

Executive Secretarial Service

The Council, for the past two years, has offered executive secretarial service to outside, but related, health organizations or specialty societies. The first organization to make use of this service was the American College of Emergency Physicians. MSMS provided executive secretarial services to the Association, serving as its headquarters office. For this MSMS was reimbursed for the secretary's time plus profit and overhead. The arrangement worked out extremely well, and the American College of Emergency Physicians grew at a rapid rate, finally outgrowing the available office space that ACEP rented in the MSMS headquarters. In May the contract was terminated and the College moved to larger quarters outside the building.

Therefore, the employee who is available to provide these services is now being retained on a part-time basis serving the Woman's Auxiliary and the Medical Assistants Society.

We have, once again, made a mailing to the officers of the medical specialty associations informing them of available services from the MSMS Executive Secretarial Service.

Liaison with Woman's Auxiliary and Medical Assistants Society

As mentioned above, MSMS continued its arrangements to provide staff assistance to the Woman's Auxiliary and to the Michigan State Medical Assistants Society. An employee is assigned to help in any way required to aid these organizations in their support of aims and goals of the Michigan State Medical Society. These two groups are especially helpful to MSMS in its legislative and communications efforts.

The Council believes that the staff support to these organizations has been appreciated and helpful in strengthening the organizational structure of the two groups.

Liaison with Specialty Organizations

The Council has been kept informed of progress in improving liaison with specialty organizations as outlined in the address of President Harold Hiscock before the 1970 House of Delegates. In that speech, Doctor Hiscock urged improved liaison, understanding and communications among the specialty organizations and between representatives of those organizations and the State Medical Society.

Under Doctor Hiscock's guiding hand, the representatives of specialty associations held two meetings at the MSMS headquarters in the early part of 1971 and discussed mutual interests and desirability of making some more formal organization that could serve as a communication medium with the Medical Society.

At the June meeting, the representatives of specialty societies formally organized into the Council of Medical Specialties, electing Glenn E. Moore, MD, Flint as Moderator and authorizing Doctor Moore to contact Council Chairman Ross Taylor to formalize a path of communication with The Council on an as needed basis.

Doctor Moore attended the Midsummer Meeting of The Council and requested that the moderator of the Council of Medical Specialties be permitted to attend the meetings of The Council as a guest whenever the need for communication arose. This request was enthusiastically granted.

Liaison with Blue Shield

The Council has authorized its Committee on Utilization Review and Health Insurance Problems to maintain liaison with Michigan Medical Service. This Committee is working continuously with Blue Shield officials in an effort to resolve many of the complex problems that are bound to arise because of the large volume of claims processed by Blue Shield for both its regular business and governmental health programs.

In addition, The Council invited Chairman Robert Hamburg, MD, President John McCabe and Vice-President Louis Hayes, MD, to discuss matters of mutual interest at its Midsummer Meeting. Also, staff-to-staff relationship is being maintained to increase communication and understanding.

Medical Economics

Bureau of Economic Information: With the appointment of John Anthony, Bureau Chief, in March, the Bureau has actively undertaken many assignments in connection with medical socio-economic issues with the advice and direction of three appointed advisors who have been helpful in establishing priorities. The advisors consist of the chairmen of the Committees on Planning and Priorities, Government Medical Care Programs and Medical Socio-Economics.

Among many projects, three major endeavors have been undertaken; surveys on overhead costs and fees, a relative value study and a membership profile.

The first survey on practice overhead costs was designed to answer questions concerning cost relationships between different modes of practice, different counties, and differences between specialties. The survey was pretested and reviewed by the Committee on Medical Socio-Economics before being sent to all members of MSMS. Returns are being computer-processed by the consulting firm of Danielson, Story, Taylor and Schultz. Preliminary results were reported to The Council in July and a final report is expected September 1.

The Bureau's second survey on physician charges has been sent to all MSMS members and will be reported to the House following formal publication to The Council, on September 15. This survey incorporates the ideas and suggestions of the specialty section chairmen of MSMS and will attempt to give the Society useful data concerning present fees of high frequency procedures. The information will aid in possible fee negotiations with governmental agencies.

Current projects:

Surveys on:

1) overhead costs
2) fees

Infant mortality rate comparisons
Medicare and Medicaid reimbursement
FDA ruling on drugs
Analysis of prepaid health programs
Relative Value Study staff work
Compilation of lists of non-members of MSMS by county
Study of insurance umbrella coverage

Possible studies:

Analysis of different modes of practice
Computerization of MSMS membership data
Doctors' attitudes survey
Analysis of Blue Cross/Blue Shield insurance program and how it relates to MSMS group program 94000

Relative Value Study: The Bureau is playing an important role in coordinating the work of the Relative Value Study Committee. Several meetings have been held with various representatives of both the MSMS sections and specialty organizations. These efforts are being directed to attain current relative values for the many procedures listed in the American Medical Association's Current Procedural Terminology book. A presentation by the Committee of its findings will appear for approval at the House of Delegates meeting in October.

Membership Survey: The Bureau undertook the task of analyzing by county and specialty the names of physicians in the state who were not members of MSMS. The lists of names were sent to each component society president for his information. Hopefully, these lists will offer possible candidates for membership.

Legislation

The 1971 Legislative Session has been dominated by revenue and appropriations matters. The Legal Affairs Committee met five times to review pending legislation, develop programs in concordance with House of Delegates resolutions, and adopt priorities. Committee goals and legislative activity have been reported in *Michigan Medicine*, *News Extra* and *Medigram*.

The new Department of Government Relations and visiting doctors in the Capitol Building gave major emphasis to developing legislative and governmental relationships. To this end a series of meetings have been held with the Governor, elected leadership of Senate Republicans, Senate Democrats, House Republicans, House Democrats, House Committee on Public Health, House Committee on Mental Health, individual legislators, and appointed officials from Social Services, Public Health, legislative staff and executive staff.

As a result of these efforts, a special legislative committee has been organized to study medical malpractice action, and another will study the need for more general practitioners and the cost of medical education. These study committees are to report findings and recommendations to the 1972 Session of the Legislature.

Additionally, the Legislature has adopted a joint resolution "That the three schools of medicine in Michigan, located at the University of Michigan, Michigan State University and Wayne State University, are hereby urged to establish Departments of Family Practice (and to) encourage the development of family physicians." Basic work also has been accomplished aimed toward revision of the Medical Practice Act and to define and provide for "physician's assistants."

Abortion reform passed in the Senate, stalled in a House Committee and moves for a statewide referendum are being organized. Drug abuse legislation, designed to correct inequities in criminal justice and to establish a closed regulatory system to control dangerous substances, passed in the House. Legislation to force Blue Cross to contract with all licensed non-profit hospitals has passed both houses in differing forms; final passage is likely. Companion legislation calling for certificate of need issued by the Department of Public Health for hospital construction, conversion or replacement was referred to House Committee on Appropriations. Legislation to increase annual re-registration fees for physicians and surgeons and other health professionals to $25 was enacted.

Legislation affecting medicine which is eligible for action in the fall term includes bills to require one MD or DO on all single county health boards, to exempt patient privilege when the physician believes the patient is emotionally disturbed to the point of being dangerous to himself or others, to permit hospitals which have 24-hour, 7-day emergency service to post signs on state and limited-access highways, to add to Good Samaritan statutes coverage from the scene of an accident to and including the hospital emergency room; to lower the blood alcohol content for implied consent drunkenness from .15% to .10%; to move comprehensive health planning from the Executive Office to the Department of Public Health; and, to greatly add to regulation of snowmobile drivers.

Volunteer Lobbying Program: In the second year of the *Doctor-of-the-Week* program, 18 physicians participated from February through June by spending a week representing the medical profession in the State Capitol in Lansing. Seven of the volunteers were veterans who had participated in the 1970 program and eleven were new.

The program attempts to have volunteers from all regions of the state so that contact is made with all Michigan legislators. The 1971 Spring program had representatives from the following counties: Four from Wayne, two from Ingham, one each from Bay, Cass, Delta, Gratiot, Hillsdale, Kalamazoo, Lenawee, Livingston, Macomb, Muskegon, Roscommon and Saginaw.

The MSMS program gained wide publicity through an article which appeared in *Medical Economics* in April, 1971. The article detailed the origin of the program, how volunteers are recruited, and the success with which the program has been accepted by legislators. MSMS has received various requests from other states for information on the program.

Due to its success, MSMS hopes to extend the program by having volunteers participate in the fall as well as the spring of each year.

In conjunction with the Doctor-of-the-Week program, MSMS reactivated the Key Man Committee in 1971. The Key Man Committee is made up of physicians throughout the state who maintain contact with legislators at the local level. Legislators are encouraged to contact their Key Man physician when they have questions on medical legislation. MSMS keeps the Key Man Committee appraised of current legislative developments in Lansing and supplies Key Men with MSMS positions to use when talking to their legislator.

Through the Key Man Committee and the Doctor-of-the-Week program physicians and legislators are establishing more frequent and informal communications. The Council thanks all those physicians who take time from their practice to support the legislative efforts of the Society by participating in these two programs.

Communications — Professional, Public

Michigan Medicine: The MSMS journal continues to be the major tool used to provide scientific material for MSMS members, along with information about MSMS and AMA, about socio-economic, legislative matters. Beginning in May, the former four-page, blue *News Extra* was replaced with a one-page, yellow *Medigram* newsletter twice each month to the full membership. Copy is prepared at MSMS and is in the mail the following day to get news faster than ever to members about MSMS Council decisions, about legislative issues, about committee work, etc.

Liaison with Component Societies: MSMS has in many ways developed new liaison relationships with component societies: (1) Presidents of several societies were invited as special guests to meetings of The Council; (2) a workshop was called by MSMS for the component society executive secretaries; (3) MSMS staff members visited a number of component meetings as resource persons or speakers; (4) the chairmen of some component society committees were appointed to MSMS committees in the same field.

Liaison with Other Organizations: Cooperative projects have been carried out with the Woman's Auxiliary, Medical Assistants, Michigan Health Council, Detroit Medical Associations, the SAMA chapters at the three medical schools, Michigan Dental Association, Michigan Hospital Association, and many others. The MAP weekly television program "Formula" continued to present many physicians on medical topics.

Communications with the Public: The annual report of the Committee on Public Relations describes special and ongoing efforts of The Council, officers and staff to reach the public through the press, radio, television, etc.

In addition, The Council and staff are taking a more aggressive stand in responding to adverse criticism in the public news. Our reaction varies according to specific cases, but our armamentarium includes letters to the editor, face-to-face contact with reporters or editors, informational responses, "setting the record straight" and guidance meetings with newsmen and publishers.

Continuing Medical Education

The State Society continued to provide many postgraduate medical educational opportunities to members.

1970 Annual Scientific Session: The session in Detroit, September 23-24, drew more participants than the year before. Topics of importance to the everyday practice of medicine were covered by speakers at the general meetings and more specialized presentations were sponsored by the MSMS Sections, the Michigan Heart Association, the Michigan Diabetes Association and other related groups. The four all-day courses covering subjects in depth were well attended.

Fall and Spring Programs: The 1970 fall and the 1971 spring postgraduate programs were provided with the cooperation of Michigan's medical schools, the Michigan Department of Public Health, the Michigan Foundation for Medical and Health Education, the Midland Hospital, various county medical societies and faculty persons who paid their own transportation. Seventy-six educators covered twenty-one centers in Michigan's Lower Peninsula and fourteen centers in the Upper Peninsula.

Special Conferences: To further meet responsibilities in continuing medical education (physician and nurse), the Committee on Maternal and Perinatal Health, along with sponsoring groups, held its Tenth Annual Michigan Conference on Maternal and Perinatal Health. The Committee also conducted for representatives of county societies its third workshop which this year was on the subject of "Pregnancy and Population Problems." The usual two-day conference at the Gull Lake MSU Conference Center was again held by the Committee.

MSMS cooperated in developing the programs for the Conference on Comprehensive Health Education, and the Sixth Annual Conference on Medical Aspects of High School Sports at Michigan State University, April 22, 1971.

PART II

MATTERS REFERRED TO THE COUNCIL BY THE 1970 HOUSE OF DELEGATES

Possible Change in MSMS Health Insurance Contract. Resolution 6 directed that The Council study the possibility of changing the MSMS group health insurance contract from Michigan Blue Cross-Blue Shield to another carrier.

The Council referred this resolution to the MSMS Committee on Professional Insurance Plans. At that Committee's request, Michigan Hospital Service and Michigan Medical Service are developing new coverages containing both deductible and co-insurance features. These programs will be considered by the Committee when they are approved by the Insurance Commission and available.

MD of the Week Program. Resolutions 8 and 38, continuation of the volunteer lobbyist program, were referred to the Committee on Legislative Policy.

This program was continued in the 1971 legislative session with remarkable results. Nineteen doctors volunteered for the program, which continued into late June. Hopefully, it will be extended to the Fall Legislative Session. Physicians are offered a $300 honorarium; some accept; most rechannel the money into political uses by legislators they have met during their experience in Lansing.

Temporary Registration of Medical Doctors. Resolution 9 urged that the Michigan Medical Licensure Act be amended to allow temporary licensure of physicians with proper credentials at the discretion of the Board of Registration until the usual licensure requirements can be fulfilled.

The Council referred this resolution to the Committee on Legislative Policy. The objectives of this resolution are embodied in the proposed revised Michigan Medical Practice Act being promoted by the State Board of Registration in Medicine. The Legal Affairs Committee, the Legislative Policy Committee and The Council have reviewed the proposed revised Act and are prepared to support the revision when it is introduced. Present information indicates this will be in the Fall 1971 Session.

Establishment of Bureau of Economic Information. Resolution 10 directed establishment of a Bureau of Economic

Information and spelled out its general function. Such a Bureau has been established and is now in operation.

Opposition to Anti-Substitution Repeal. Resolutions 36 and 93 stated House opposition to attempts to repeal anti-substitution laws regarding drugs and directed publication of this opposition.

The Council referred these resolutions to the Committee on Legislative Policy for information and implementation. Anti-substitution repeal legislation has not been introduced in the 1971 Session of the Legislature. Organized pharmacy has said that it would not seek such legislation.

Council Recommendation re Reimbursement of Physician Members of Blue Shield Board. Resolution 37, concurring in The Council's recommendation that MMS physician Board members not be reimbursed, was received for information by The Council.

Objection to Reimbursement of Chiropractors in Federally Funded Programs. Resolution 39, which urged that chiropractors be denied financial participation in any federally-funded health program and directed publication of MSMS policy in this regard, was referred by The Council to the Legislative Policy Committee for information and implementation.

Federal HR 1, amending the Social Security Act, provides for study of chiropractic without immediate recognition under Medicare. At state level, chiropractic services are paid under Medicaid, pursuant to an Attorney General's opinion. MSMS has objected both to the Governor and the Department of Social Services.

Printing of MSMS Directory of Members. Resolution 40 amended The Council's original recommendation to instruct that an annual directory be published with a listing by component societies with a city-county cross-indexing.

The 1971 Directory, authorized by this resolution, was published in January as an issue of *Michigan Medicine,* using the photo-offset process from IBM computer print-outs as an economy measure.

Malpractice and the Contingency Fee. Resolution 44, re possible steps to be taken to solve problems regarding malpractice and the contingency fee, was referred by the House, without approval, to The Council for further study. The Council, in turn, referred the resolution to the Legal Affairs Committee for study and recommendation to the Legislative Policy Committee.

Through MSMS efforts, a joint Senate-House Study Committee on the entire matter of malpractice and professional liability in the field of medicine has been established. The contingency fee will be one of the items for consideration by the study committee.

Guidelines for Rehabilitative Care. Resolution 45 directed that the Rehabilitation Committee, with the cooperation of the Socio-Economics and Hospital Relations Committee develop guidelines for rehabilitative care and appropriate remuneration for same. The Committee on Rehabilitation is now in the process of developing such guidelines (see Summary of Activities for that committee.)

Drug Intoxication and/or Addiction a Disease. Resolution 48 directed that MSMS declare drug intoxication and/or addiction as a disease which should be a Medicaid benefit and appropriately publicize the statement.

The Council referred this resolution to the Legislative Policy Committee for information and implementation. Although initial efforts were made, the activity has failed to gain attention.

Increase in State Funds for Alcohol Programs. Resolution 65 directed that MSMS request the Legislature for more funds for approved alcohol programs for medical care and rehabilitation.

The Council referred the resolution to its Legislative Policy Committee, which reports that the Governor has recommended an additional $375,000 to augment the community alcoholic clinics in the state. There has been no further action on this issue.

HEW Evaluation of Chiropractic. Resolution 71 urged county medical societies to inform state legislators of the HEW evaluation of the practice of chiropractic.

The Council referred the resolution to its Legislative Policy Committee. To assist the county societies, MSMS mailed pamphlets outlining the HEW conclusions to physicians along with the November 18 *Medigram.* MSMS has also regularly reported on chiropractic legislation through its publications.

Civil Prosecution of Individuals Associated with Possession or Transmission of Dangerous Drugs. Resolution 73 seeks legislation to make it an offense to allow and/or condone the use of narcotics and dangerous drugs within any residence. The Council referred it to the Legislative Policy Committee.

House Bill 4882 or Senate Bill 591 would establish a closed regulatory system for controlled drugs. If either of these bills is passed it will be a violation to possess any of the controlled substances without registration or prescription.

Preparation of Contractual Fee Schedule for Governmental Agencies. Resolution 81 directed that MSMS develop a fee schedule satisfactory to the medical profession for all professional contractual relationships with governmental agencies.

The Council referred this resolution to the Finance Committee, which will act on it when the report of the MSMS Relative Value Study Committee is received.

Repeal of Basic Science Act. Resolution 83 again urged repeal of the Michigan Basic Science Act. However, on the advice of its Legislative Policy Committee, The Council agreed that MSMS action to pursue this objective would be deferred until the 1972 Legislative Session.

Opposition to Contingency Fee System in Malpractice Cases. Resolution 92, which opposed the contingency fee system and urged a study of this problem by MSMS and AMA, was not approved by the House but instead referred to The Council for further study.

The Council in turn referred it to the Legal Affairs Committee for study and recommendation to the Legislative Policy Committee. The item has become a part of the legislative study on malpractice and professional liability.

Possibility of Forming Medical Foundation in Michigan. Resolution 100 directed that The Council investigate the desirability of forming such a foundation and if found desirable take the necessary steps for forming one.

The Committee on Utilization Review and Health Insurance Problems has been given the responsibility for making a feasibility study. It is reporting its recommendations to The Council and the House of Delegates that a foundation be formed with specific purposes and objectives.

Medicare Home Health Services. Resolution 101 directed that MSMS initiate action to protest the present interpretation of Home Health Care and urge return to traditional VNA service, as well as the expansion of home health services.

The Council referred the resolution to its Legislative Policy Committee. In view of the financial crisis in the state this resolution has not been pursued vigorously.

Change of MSMS Service Policy to Indemnity Policy. Resolution 102 directed that MSMS request the Legislature to change the Blue Shield enabling act to allow an indemnity rather than a service policy.

In accordance with House instruction, The Council referred the resolution to the Legislative Policy Committee.

A great amount of activity in the Legislature this year, centering on the "Blues," resulted in a year-long study of both organizations. There is no direct action proposing indemnity policy.

Cooperation with Michigan Hospital Association. Resolution 103, urging greater cooperation with MHA, was referred by The Council to the Committee on Planning and Priorities. This Committee reported that it felt the present liaison committee working with MHA fulfilled the intent of the resolution.

However, the Committee noted that additional liaison was being accomplished through periodic meetings of the MHA and MSMS staffs, as well as by special groups of members of each organization meeting to solve specific problems or to discuss matters of mutual concern.

Professional Liability Legislation. Resolution 106 directed 1) That MSMS propose legislation to insure liability coverage for all licensed physicians in Michigan, 2) attempt to gain public support for such legislation, 3) explore the possibility of providing group coverage for MSMS members, and 4) that a committee of MSMS conduct immediate and continuing investigation into this problem.

The Council referred Item 1 to the MSMS Legal Affairs Committee, and Items 2, 3 and 4 to the MSMS Committee on Professional Insurance Plans.

The MSMS legislative department reports that this subject will be part of the legislative study on malpractice and professional insurance.

Opposition to Bennett Amendment to 1970 Social Security Amendments. Resolution 107 expressed MSMS opposition to the Bennett Amendment which would have established a professional standards review organization for the Medicare and Medicaid programs.

MSMS did express opposition to the appropriate committees of Congress and subsequently Congress adjourned without taking action on the proposal.

COMMITTEE REPORTS

15. Annual Summaries of Council Committees

Committee on Alcohol and Drug Dependence

Richard C. Bates, MD, *Chairman*

The Committee met on December 2, 1970, March 31, and June 2, 1971.

The Committee continued its liaison with the Michigan Department of Public Health, student representatives from the Michigan State University and the University of Michigan, representatives from the MSMS Judicial Commission, the Governor's Office on Drug Abuse, the National Commission on Marijuana, the Flint and Grand Rapids Alcoholism and Drug Programs, the Michigan Association of Osteopathic Physicians and Surgeons, members of the Legislature and with the deans of Michigan's medical schools.

The Committee held a special meeting to discuss the inclusion of courses on substance abuse in Michigan by the three medical schools. The following matters were also reviewed: treatment facilities in non-mental health units, guidelines on Methadone maintenance, indiscriminate drug prescribing, the alcohol and/or drug abusing physician, and activities throughout the state on alcohol and drug dependency and legislative matters.

The Committee considered the 1970 House of Delegates referral and subsequently sent a questionnaire to Michigan's component medical societies. The returns from the questionnaire will be tabulated and studied to find out how the Committee on Alcohol and Drug Dependence can best assist component societies in their own areas, or to coordinate possible regional or statewide efforts.

The Committee will continue discussion of the problems of the alcohol and/or drug abusing physician with the hope that conclusions can be reached during the next year.

Committee on Education Liaison

Brock E. Brush, MD, *Chairman*

The Education Liaison Committee met March 31, 1971; and a number of activities were carried on by staff at the direction of the chairman. The committee continued its prescribed function, "to advise the Council on matters pertaining to undergraduate medical education, licensure, etc."

The major project was the 1971 summer MSMS-SMA-MHA project which placed 51 Michigan medical school students at 23 community hospitals for a 10-week orientation program. The students, most of them sophomores, received a stipend. The Michigan Hospital Association helped interest the hospital boards and administrators in the project, the three SAMA chapters promoted the opportunities among the students and made the final assignments to the hospitals; and MSMS helped interest physicians to serve as coordinators for this orientation-teaching project. MSMS staff coordinated the entire effort. From all indications from the students, hospital officials and MD-coordinators, the project was very successful in orienting students to the many fine Michigan hospitals. This program, on a pilot basis, placed 11 students at 7 hospitals in 1970.

A subcommittee, William G. Birch, MD, Chairman, worked again to advise and assist Western Michigan University in the development of its curriculum to educate "Physician assistants." Western Michigan in the summer received a $61,830 grant from the U.S. Department of Health, Education and Welfare to fund the first year of the new program. The curriculum is being completed now, staff obtained, etc., and the first students are scheduled to begin the four-year, degree course in the summer of 1972. The Committee hosted a one-day workshop on the physician assistant movement at the MSMS building with legislators, medical educators, representatives of the State Board of Registration in Medicine, and other interested groups taking part. Several bills to license or certify physician assistants have been introduced in the Michigan Legislature and will be considered this fall. (The MSMS House of Delegates in 1965 approved the theory and concept of physician assistants and in 1970 adopted a resolution to endorse the proposed WMU pilot program.)

The committee received a report from the three deans about the financial needs of medical students; and will meet again in September to explore some possible answers. Many Michigan students face serious financial needs because costs of attending medical school have increased and the amount of available money has declined. The situation is more acute for the growing number of disadvantaged students who now are attending medical schools. (A report from the AMA-ERF Student Loan Guarantee Program revealed that 1,215 loans had been guaranteed to Michigan students, interns and residents from 1962 through 1970, totaling $1,383,190. During 1970, the AMA-ERF fund guaranteed locals to 33 U-M students, 34 WMU students and 16 Michigan interns and residents, totaling $108,700. Michigan State University students receive their loans through the Continental Illinois National Bank of Chicago, and their figures were not available.)

MSMS has assisted a movement by several Wayne State University medical students who are promising Michigan communities to practice there later in return for financial assistance now and interest cancellations. The coordinator for the Muskegon group, which will help three WSU students this fall, attended the Education Liaison Committee as a guest.

The Committee was asked to send Resolution 7 approved by the 1970 MSMS House of Delegates to the three deans and urge them to establish departments of family practice. The deans have replied and the matter was discussed at the Committee meeting. The replies fall short of agreeing to establish departments. The Committee was represented, as was the MSMS Legal Affairs Committee, at a meeting called in the spring by the Michigan Academy of Family Practice with the three deans. The Michigan Legislature adopted a resolution respectfully urging the three schools to establish departments of family practice.

Committee on Eye Care

Robert T. Blackhurst, MD, *Chairman*

The Committee held one meeting on April 21, 1971 and continued its liaison with the Bureau of Maternal and Child Health of the Michigan Department of Public Health, the Department of Social Services, Division of Services to the Blind, and the Lion's Club Sight Mobiles.

The Committee discussed the preparation of an informative pamphlet on juvenile diabetes and associated eye disorders. Subsequently, this was referred to the Committee on Child Welfare.

The Committee heard reports on and gave recommendations concerning these matters: checkpoint law report for 1970, preschool and school screening, low vision clinics in relation to services for the blind, eye care in relation to services for the blind, Dyslexia project, deaf-blind program and problems of payment for eye glasses and dental care as handled by the Michigan Department of Social Services.

Committee on Hospital Relations

A. Carl Stander, MD, *Chairman*

This Committee met on December 16, 1970, February 10, April 7, May 19 and June 23, 1971.

The task of compiling appropriate questions for inclusion in the Michigan Study of Doctor-Hospital-Efficiency-Project involved numerous meetings with the Michigan Hospital Association and joint staff. The Michigan Association of Osteopathic Physicians and Surgeons and the Michigan Osteopathic Hospital Association were added as co-sponsors to insure broader response to the survey. Periodic data reports will be provided MSMS when compiled.

Resolution 97 of the 1970 MSMS House of Delegates directed a study of the multiplicity of hospital inspections. The Committee determined that the number of inspections now required either by a variety of governmental agencies and professional organizations are necessary for the health, safety and welfare of patients, employees and the visiting public. Such inspections and surveys provide assistance and advice in order that hospitals can meet and continue to meet the required regulations for licensing, certification and accreditation.

The Committee met with representatives of the Michigan Association for Graduate and Postgraduate Medical Education to exchange information about goals and objectives and to develop continued liaison.

Resolution 51 of the 1970 MSMS House of Delegates directed a study of the Michigan State Hospital Staff Association. The Council disapproved an initial recommendation and referred "the matter of the relationship of medical staff to organized medicine back to the Committee for more intensive study and future report to The Council." The Council subsequently adopted a substitute recommendation that "every effort be made to encourage all specialty and medical groups to become active within the structure of organized medicine."

Resolution 45 of the 1970 MSMS House of Delegates requested appointment of an ad hoc committee to work with the MSMS Committee on Rehabilitation to formulate guidelines for rehabilitative care in acute hospitals or extended care facilities under Medicare and Medicaid. The Council authorized the Committee on Hospital Relations and Socio-Economics to assist in this endeavor.

Other matters considered were: PSRO (Bennett Amendment); Michigan's efforts to reduce accidents to employees; physicians and patients in hospitals; medical staff representation on hospital governing boards; and state legislation.

Committee on International Health

Hira E. Branch, MD, *Chairman*

There were no matters referred to this Committee, so no meeting was held.

Liaison Committee with Medical Students

George H. Koepke, MD, *Chairman*

This new Committee held one exploratory meeting on March 11, 1971, to bring together selected physicians and representatives of the three SAMA chapters. MSMS encouraged the SAMA chapters to select representatives to MSMS committees and during the year students did participate in the MSMS Committees on Public Health, Rural Medical Service, Drug Dependence, and others.

The Committee decided that the financial needs of medical students may be the major subject for further exploration and a meeting is planned for September between the Liaison Committee with Medical Students, the Education Liaison Committee, and representatives of the banking and loan industry.

Liaison with the Michigan State Pharmaceutical Association

Robert E. Rowe, MD, *Chairman*

The Committee met on May 26, 1971.

Information was received that use of a new form to comply with Michigan Board of Pharmacy Rule 16 (c) had largely eliminated errors and misinterpretations of physicians' written prescription orders by nurses and ward clerks. To measure the effectiveness of this Rule, the Committee sent a questionnaire to chiefs of hospital medical staffs to be answered by the chairman of the pharmacy or therapeutics committee.

It was concluded that because physicians and pharmacists practice under professional codes of ethics a formal code of understanding between the two professions is unnecessary.

The Council approved a Committee recommendation that the MSMS Committee on Alcohol and Drug Dependence invite representatives of MSPA to help develop operational guidelines in the handling of prescriptions and dispensing of methadone by private practitioners.

The Federal Comprehensive Drug Abuse Prevention and Control Act of 1970 and Michigan legislative bills HB 4882 and SB 491, to comply with the Federal statute, were reviewed.

The MSPA wrote a letter to MSMS suggesting that medications be prescribed on the basis of rationalization and dosage. The Council approved a recommendation authorizing a second article in *Michigan Medicine* suggesting that physicians continue to prescribe rational quantities of drugs limited to the patient's personal health requirements.

The Chairman authorized a telegram to the HEW Department Hearing Clerk requesting action be deferred on proposed rule changes on combination drugs until the practicing sector of the medical profession is consulted. The Council adopted a similar resolution from the Ingham County Medical Society and directed that communications be sent to appropriate Federal officials and the AMA.

Other matters discussed were: Federal regulations for methadone treatment programs and state legislation.

The staff secretary assisted a number of physicians in applying for narcotic registration numbers under new regulations adopted by the Bureau of Narcotics and Dangerous Drugs (BNDD).

Liaison Committee with State Bar of Michigan

Richard C. Reilly, MD, *Chairman*

This Committee did not meet because no matters were referred.

Liaison with Board of Registration in Medicine

ORLEN J. JOHNSON, MD, *Chairman*

There were no matters referred to the Committee and, consequently, no meeting was held.

Liaison Committee with State Executive Office

KENNETH H. JOHNSON, MD, *Chairman*

Although this Committee held no formal committee meetings during the year, it has maintained sound relations with the State Executive Office and assisted in two personal interviews with the Governor. Topics discussed with the Governor included Medicaid payments, encroachment by Chiropractic, Medical Education and Manpower, Physician's Assistants legislation and medical malpractice problems. Additionally, constant liaison is maintained with key executive staff involving legislation positions, appointments of doctors of medicine to boards and commissions, and other governmental affairs.

The Committee appreciates the accessibility of the Governor and his staff to Organized Medicine.

Committee on Medical Aspects of Organized Athletics

GERALD A. O'CONNOR, MD, *Chairman*

The Committee held meetings on December 10, April 1, and June 3. The major project was the sponsorship of the Sixth Annual Michigan Conference on the Medical Aspects of High School Sports at MSU Kellogg Center on April 22. More than 200 team doctors, trainers, coaches and school officials participated in the daylong program about conditioning, handling of injuries, use and misuse of drugs in athletics, demonstrations, etc. This year the Michigan Chapter of the American College of Emergency Physicians joined as a co-sponsor along with MSU.

The Committee's discussions centered around the question of how best to provide good physical examinations for high school athletes. The Committee is continuing its discussions with officials of the Michigan High School Athletic Association and plans to make recommendations in the fall to the MHSAA for possible implementation during the 1972-73 school year. The complex subject involves answers to questions about the physical examination report form, about the extensiveness and the frequency of the exam, etc. Related also is a bill pending in the State Legislature to require comprehensive medical examinations for every junior high and senior high student.

The Committee also continued its discussions about ways to improve the training given to school trainers.

Committee on Medicine and Religion

WINSLOW G. FOX, MD, *Chairman*

The Committee held its annual workshop for committee members and their clergymen-guest on May 6, 1971. A member of the AMA Medicine and Religion Department and a University of Michigan hospital chaplain made the major presentations. Suggestions were offered to county medical societies for expanded efforts in the medicine-religion field.

The Committee will sponsor a Prayer Breakfast at the 1971 MSMS House of Delegates in Grand Rapids, on Tuesday, October 5, as a new project.

Committee on Rehabilitation

LIONEL L. DAVIS, MD, *Chairman*

The Committee held meetings on December 3, 1970, January 19, 1971, March 4, 1971, and May 6, 1971. The Committee had liaison with the Michigan Department of Social Services, the Michigan Department of Public Health, the Sparrow Hospital Rehabilitation Department, Michigan Blue Shield-Michigan Blue Cross, the MSMS Committee on Medical Socio-Economics, the MSMS Committee on Hospital Relations and medical student representatives from the Michigan State University.

During the last two years, the Committee has endeavored to put together a picture of the periphereal difficulties facing rehabilitation and physical medicine. This has been made necessary by the increased attention to long-term illness, particularly as supplied to people over age 65 under the terms of the Medicare Act, the Extended Care Act and the Medicaid provision. It is believed that the original intent of the Act was to decrease the stay of long-term illness patients in hospitals and to encourage the development of a new type of progressive care. This has been a failure.

In discussion with the various guests representing the groups mentioned in paragraph one, the members of the Committee attempted to bring out some of these conflicts.

Throughout the past year, the Committee has labored to arrive at constructive answers to the four points contained in the 1970 House of Delegates resolution No. 45, entitled "Rehabilitative Care," and to arrive at constructive answers.

The "RESOLVED" portion of the resolution reads: "That the Council utilize the Socio-Economic and Hospital Relations Committee to advise the Rehabilitation Committee on forming guidelines for rehabilitative care in acute hospitals and extended care facilities and to arrange an acceptable remuneration of both the institution providing and the physicians ordering such care."

This matter is being studied by a Subcommittee and it is hopeful that in September, 1971, a meeting can be held to review the report and recommendations of the Subcommittee.

Committee on Relative Value Study

ALEXANDER BLAIN, III, MD, *Chairman*

As directed by Resolution 3 of the 1970 House of Delegates, the RVS Committee has proceeded to establish a new Michigan Relative Value Study, using the American Medical Association's *Current Procedural Terminology* for coding and describing medical services with the following guidelines:

1. The CPT was used as the basis for coding and describing medical services.
2. Separation of the four major sections (medicine, surgery, pathology, and radiology) was maintained with no attempt to relate relative values between sections.
3. The unit values assigned to each medical service when multiplied by a $5.00 conversion factor as far as possible reflect the current customary charge for the service.
4. The state was treated as an entity and not broken into geographic areas and
5. One set of unit values was assigned to each service even though the service may be performed by more than one medical specialty.

The Committee is pleased to report that it received excellent cooperation from the sections and specialty groups. We regret, however, (1) that the Michigan Society of Internal Medicine chose not to participate in the study, (2) that the Michigan Society of Pathologists could not complete its work in time to be reviewed by the Committee, and (3) that we could not accept the unit values offered by the Michigan Ophthalmologic Society because they did not meet the guidelines as established by the Committee. Consequently, we are unable to offer values for procedures in these three areas.

The Committee has recommended that The Council approve the relative values contained in this report to supersede those in the 1968 RVS and that The Council instruct the 1971-72 RVS Committee to (a) complete the unfinished sections of this year's report, hopefully with the assistance of the specialty organizations involved and (b) consult with appropriate MSMS sections and their respective specialty organizations to refine the coding and procedure descriptions where needed.

THE REFERENCE COMMITTEE on Health Insurance and Medical Services, James B. Blodgett, MD, Chairman, considered the report of the RVS Committee and recommended that the report be approved as an interim report and that it be returned with the commendation to the Committee for its eventual completion.

THE HOUSE adopted the report of the Reference Committee.

Committee on Utilization Review and Health Insurance Problems

Robert C. Prophater, MD, *Chairman*

The Committee on Utilization Review and Health Insurance Problems developed guidelines for the MSMS Peer Review Program covering the organization and procedures for county medical society committees charged with peer review responsibility and Councilor District Regional Medical Advisory Committees. These procedures were approved by The Council and have been transmitted to Blue Shield and the Health Insurance Council which represents commercial health insurers. Early reports indicate that these efforts have resulted in efficiencies that expedite the handling of cases for both carrier and physician.

The 1970 House of Delegates urged The Council to study the concept of foundations and if feasible to organize such a corporation. The Committee was assigned the task of developing forms and content of any proposed foundation with the additional responsibility of preparing purposes, objectives and corporate structure.

The preliminary report of the committee is that the immediate and primary function of any health review corporation (foundation) planned be peer review. Interest in such a service by the physician-member corporation has been evidenced by the Michigan Department of Social Services and insurance companies.

An analysis of the essential provisions to be contained in the Articles of Incorporation and Bylaws was reviewed by The Council on September 15th and these documents are now being drafted for presentation to The Council on October 3rd.

16. Annual Summaries of Standing Committees

Ad Hoc Committee for Malpractice Actions and Professional Liability

Frank B. Bicknell, MD, *Chairman*

This ad hoc committee was appointed pursuant to Council authority after the Legislature had adopted Senate Concurrent Resolution 18, creating a joint House-Senate study of medical malpractice actions. The ad hoc committee is charged with maintaining liaison with the legislative study, and providing the physicians' view to the study. The legislative committee has organized, but has not become actively engaged in its work yet. Meanwhile, the ad hoc committee has held one meeting to prepare its input into the legislative study.

Ad Hoc Committee on Medical Examiner System

William A. DeYoung, MD, *Chairman*

This ad hoc committee was established pursuant to authority by The Council. It was charged with developing plans to encourage physicians to offer their services as county medical examiners or deputy medical examiners. The ad hoc committee met twice this year and sponsored one regional conference to explain the medical examiner system to physicians from Jackson, Calhoun, Branch, Hillsdale and Lenawee Counties. Twenty-two physicians attended the conference. Subsequently, based on the success of the Jackson conference, The Council authorized the committee to sponsor similar, self-sustaining regional conferences in Grand Rapids, Grayling, Marquette and Saginaw.

The ad hoc committee also interested intself in Senate Bill 77, which would provide for lay medical examiners where physicians do not accept appointment. The bill lies before the Senate Committee on Health, Social Services and Retirement.

Ad Hoc Committee for the White House Conference on Aging

Jack F. Sanders, MD, *Chairman*

This Committee met on April 21, 1971.

This Committee was appointed to offer assistance and make recommendations to state-wide regional conferences and the White House Conference on Aging in November, 1971.

The Committee reviewed recommendations of the 1961 State regional conferences on health, medical care and rehabilitation services as they relate to current needs of the older citizen.

A representative of the Michigan Commission on Aging provided a comprehensive review of activities and accomplishments designed to improve the well-being and quality of life of older citizens. He emphasized that cooperation with government and private agencies is necessary.

Several members participated in and contributed valuable suggestions during the March, 1971 state-wide regional conferences.

The Council thanked the Committee for enunciating six Principles required if older citizens are to live in dignity.

The Committee heard a presentation on the Well-Being Project for the Aged in Detroit.

MSMS was a co-sponsor of the 24th Annual Conference on Aging in June, 1971, Ann Arbor, and is cooperating to secure interested members to attend Workshops on Protecting the Elderly sponsored by the Institute of Gerontology of the University of Michigan-Wayne State University in the Fall, 1971.

Advisory Committee to the American Association of Medical Assistants, Inc., State of Michigan

Glenn E. Millard, MD, *Chairman*

The yearly meeting of the Advisory Committee to the AAMA, Inc., State of Michigan was held on April 30, 1971 at Webers Inn in Ann Arbor. A majority of members was present.

Some of the conclusions and recommendations of this meeting were:

1. That more physicians should become involved in the activities of the medical assistants, since it is an officially sponsored program of MSMS.
2. That physician employers who pay the dues of their medical assistants and/or who defray expenses for their attendance at the meetings of AAMA, Inc., State of Michigan, should be commended.
3. That in light of the current MD-DO cooperative efforts, MSMS should support efforts of the medical assistants in encouraging DO employee membership into the organization of AAMA, Inc., State of Michigan.

A special recommendation which was presented to the Council of the Michigan State Medical Society, and was approved at their July meeting requests:

THAT AN APPROPRIATE COMMITTEE OF MSMS CONSIDER OFFICIAL APPROVAL OF THE AAMA EDUCATIONAL PROGRAM AND COMMUNICATE WITH THE COUNCIL OF THE MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY AND EXPLORE THE BEST MEANS OF CONTACTING THESE EDUCATIONAL INSTITUTIONS AND SUPPORTING THE PROMOTION OF THE AAMA PROPERLY APPROVED MEDICAL ASSISTANTS COURSES IN THE

EDUCATIONAL INSTITUTIONS OF THE STATE OF MICHIGAN.

Advisory Committee to the Woman's Auxiliary

F. P. Rhoades, MD, *Chairman*

The officers and members of the Woman's Auxiliary to the Michigan State Medical Society had a very busy and most productive year. Officers and key chairmen began their year by attending a North Central Workshop in Chicago in October under the auspices of the Woman's Auxiliary to the American Medical Association. In October and November the officers and chairmen of standing committees participated in five district meetings held throughout the state.

A most successful fourth Legislative Day was held in March at the Olds Plaza Hotel, Lansing. Attendance was the largest ever with some 110 at the luncheon. Thirty-eight Legislators were present, each as the personal guest of an Auxiliary member from their District. Being in Lansing as the Legislative Volunteer of the Week for the Michigan State Medical Society, was privileged to report to the Auxiliary on the status of pending medically oriented legislation at their Workshop.

Their outstanding event of the year was the Spring Conference at the Sheraton-Pontiac with an all-time high registration of 125. Mrs. William Milliken, wife of our Governor, was the luncheon speaker. As Chairman of the Advisory Committee, participated in this program on a panel discussion, "The Triad of Life."

The Auxiliary continued its support in both money and time to AMA/ERF, Mental Health, International Health, Community Health, Safety Preparedness, and Home Centered Health Care. Financial support was also given to the WA/SAMA Chapters of all three medical schools.

As Chairman of the Advisory Committee it was my privilege to attend and participate at their conferences; conferred frequently with their Officers and, especially, their President with whom a close and understanding relationship exists.

Committee on Cancer

Max E. Dodds, MD, *Chairman*

The Committee met on November 11, 1970, and on May 19, 1971.

Liaison has continued with the member-organizations of the Michigan Cancer Coordinating Committee: the Michigan Cancer Foundation, the Michigan Department of Public Health, the Michigan Health Officers Association, the Michigan Dental Association, the American Cancer Society, Michigan Division, the Michigan Association of Osteopathic Physicians and Surgeons Inc. and the Michigan Association for Regional Medical Programs.

The Committee has requested the Director of the Michigan Department of Public Health to include in the process of approving hospitals for Medicaid patients a strong recommendation that cervico-vaginal cytologic examinations ("PAP") be performed on all female in-patients and clinic out-patients 20 years of age or older, with these exceptions: (1) Patients in labor, those with abortions or threatened abortions, and those with active vaginal bleeding, (2) Seriously or critically ill patients, those in isolation for infectious diseases, and all others in whom the performance of a vaginal smear would be hazardous or would obviously not be effective, (3) Patients who have had a smear in the preceding 12 months, and those who do not desire the examination, (4) When exempted by order of the attending physician.

The Committee received approval for its recommendations that the Michigan State Medical Society lend its moral support to the new organization of Tumor Registry Secretaries being organized by the Registry Division of the Michigan Cancer Foundation.

Its Subcommittee continued its work on Michigan Tumor Registries and is hopeful that conclusions can be reached during the next year.

Committee on Cardiac Disease

Michael C. Kozonis, MD, *Chairman*

The Committee had one meeting on June 16, 1971. It continued its liaison with the Michigan Heart Association regarding its Nutrition Survey, Project ECG-IQ, Coronary Care Unit Training Programs and publications of the Inter-Society Commission for Heart Disease Resources.

Reports were also given regarding the Coronary Care Education Project of the Michigan Heart Association, the Kellogg Coronary Care Unit Program, the Professional Advisory Council on Heart Disease of the Michigan Association for Regional Medical Programs.

The Committee has requested the help of the Committee on Public Relations in developing a policy statement urging all members to actively discourage smoking in their offices and waiting rooms, and to conduct campaigns against smoking in patient care areas in hospitals to help bring about the cessation of the sale of cigarettes in hospitals by hospital auxiliary groups.

The Committee has recommended to the Michigan Hospital Association that proposed requirements to change the 1971 National Electrical Code to require the use (on a per bed basis) of an "Isolated Power Center" in so-called "electrically susceptible patient areas" of a hospital be not passed into any law nor adopted for state-wide building code until a statement regarding the efficacy and cost of this device as a safety measure has been more clearly resolved.

Committee on Child Welfare

John M. Dorsey, MD, *Chairman*

The Committee met on November 18, 1970, and on July 1, 1971.

The Committee has been concerned with the following matters: strengthening of state regulation regarding amphetamines and barbiturates; reactivation of the Michigan Youth Commission; education for pregnant girls; medical treatment of minors without parental consent; sudden infant deaths; the White House Conference for Children and Youth; allied health workers; Medicaid abuse by both the patient and the physician; day care centers for children; and juvenile offenders.

The Committee reviewed the proposed revisions to the "Health Standards for Day Care" and made recommendations to the Michigan Department of Public Health, Division of Child Health.

Under study by the Committee is the school health form, protecting children against physical abuse, medical rights of juvenile offenders, social research and development, neonatal mortality, and the referral from the Eye Care Committee regarding a pamphlet of information for use by juvenile diabetics.

The Committee has recommended that the Michigan Department of Public Health use and supply oral vaccines rather than Salk Vaccines. Also, that the Committee on Legal Affairs consider legislation that, along with the serologic test for syphilis, it be considered compulsory that the blood specimen be examined for rubella immunity status and that the results of the test be made available to the patient.

Committee on Governmental Medical Care Programs

Rorebt E. Rice, MD, *Chairman*

The Committee met on September 9, 1970, March 31 and June 2, 1971.

The Council approved a recommendation to abolish the State Comprehensive Health Planning Commission because of inactivity and undefined responsibilities. CHP Advisory Council was commended for opposing Michigan Senate Bill 1756 which would permit coverage of chiropractic services under Blue Shield plans.

The Committee concurred in a recommendation of the MSMS Committee on Socio-Economics that a counseling and negotiating service be established.

The Chairman and Doctor Joshua S. Williams, Detroit, testified before a State Legislative Committee suggesting methods to improve Medicaid and achieve economy. Opposition to the arbitrary reduction of fees and a subsequent moratorium on payments under Medicaid were expressed. The State-funded MACRO Report was analyzed and found to be incomplete and inaccurate.

The Council approved the Committee's recommendation that the MSMS Committee on Planning and Priorities study and make recommendations concerning AMA long-range objectives.

The Council approved the following amended Statement of Policy on Comprehensive Health Planning developed by the Committee for distribution to areawide advisory councils, State and Federal offices and component medical societies:

1. MSMS continues to support the concept of comprehensive health planning but desires to be an active participating partner in the "Partnership for Health" program.
2. MSMS recognizes that Dean Andrew Hunt's position is valid and acceptable when he states that "It seems clear that, without a major national effort to improve the status of our citizens living in unfavorable conditions in our cities and rural areas, a crash program to provide more adequate medical services and better distribution of them will have little effect on the basic problems of health in this nation" and "the basic issue of life quality which is an absolute necessity for successful medical care is, in fact, the responsibility of society in general . . ."
3. In compliance with Public Laws 89-749 and 90-175 health providers should have 49 per cent representation.
4. Active participating physicians should constitute a significant percentage of providers, a majority of whom shall be active participating professionals (the term practicing professionals are those whose principal responsibility is to provide direct health care).
5. Active participating physicians on areawide councils should be selected from recommendations made by component medical societies based on expertise and willingness to serve.
6. Comprehensive health planning sub-committee appointments should include both consumers and providers who are not governing board members and who have particular expertise.
7. MSMS should increase its efforts to seek cooperation with other organizations interested in health care.

A special sub-committee was appointed to study and recommend to The Council possible guidelines on health maintenance organizations for interested component medical societies and individual physicians. The Council amended a recommendation of the Committee and approved it as follows:

RECOMMENDATION TWO: That The Council authorize MSMS to seek a Federal grant to finance an informational study under MSMS administration. The receipt of Federal funding would in no way commit MSMS to the HMO concept. Such funding should be used for determining MSMS policy, be primarily informational through analysis, and place MSMS in a position to make proper judgments to establish appropriate policies to benefit interested county medical societies.

The Chairman appointed a sub-committee to further analyze and recommend improvements under Medicaid. The Council considered a statement of MSMS policy on this subject, developed by the subcommittee and after amendment adopted these Principles. The following Principles will serve as necessary ingredients of any MSMS position in all current or evolving Federally-financed medical and health care delivery programs:

Preamble: The only purpose of government medical care programs for indigent patients is the delivery of quality health care to those patients. In order to assure such patients quality medical services with due regard for (1) the patient, (2) the provider, and (3) the government which must subsidize the program, the Michigan State Medical Society offers the following Principles it believes are vital ingredients for a successful program.

1. Determinations of service that are medically necessary should be the sole responsibility of the physician.
2. High quality of medical services must be protected from cost control by funding agencies — although necessary services should be provided as economically as possible.
3. Undue regimentation will make physicians unable to exercise their best medical judgment in patient care.
4. The government should recognize increased consumer demand for additional sophisticated medical services by appropriating sufficient monies to insure continuity of all programs.
5. The Michigan Department of Social Services should seek to insure that recipients are clearly and concisely informed of eligibility requirements and available medical services.
6. Medicaid should include comprehensive, preventive health maintenance and ambulatory care to de-emphasize costly hospital and nursing home care.
7. Both physicians and patients should be subject to reasonable utilization review.
8. There is a need for better distribution of physicians and health care in ghetto and rural areas.
9. Income earned under government medical programs should not be a matter of public disclosure.
10. Physicians should be encouraged to provide medical care to the indigent and disadvantaged.

Other matters considered were: a letter from the Michigan Neurological Association about rehabilitative care and treatment; a report about the new MSMS Bureau of Economic Information; uniform fee schedules and closer liaison with the MSMS Committee on Socio-Economics.

A report that two component medical societies plan to negotiate Medicaid reimbursement contracts with the Michigan Department of Social Services was received. There was consensus that such an action would be untimely.

Council Chairman Taylor sent a communication to Presidents of county medical societies that "MSMS has several committees gathering information and formulating opinions as to satisfactory arrangements to deliver services to Medicaid patients. We expect recommendations at the State level shortly. Therefore, we caution component societies against precipitous action at a county level, and stress the necessity of organized medicine functioning as a cohesive statewide group representing practicing physicians."

The Committee will participate with the MSMS Socio-Economic Committee in studying this problem and its implication.

Informational articles and data regularly appeared in *Michigan Medicine* and Medigram about current and proposed legislation and administrative rules and regulations for the edification of the individual physician. Staff liaison and communication with Federal/State agencies continues at an accelerated pace.

Committee on Highway Injury

Paul W. Gikas, MD, *Chairman*

This Committee met on February 17 and May 5, 1971.

The Committee is investigating the possibility of providing ambulance service as a benefit in automobile insurance policies. A letter of inquiry to motor clubs and appropriate Federal/State bodies to solicit interest and support was approved.

The Committee continues to seek improvement in snowmobile construction and to license vehicle operators comparable to requirements for operating automobiles. The Council adopted recommendations endorsing licensing and age requirements; statewide public educational programs warning of the hazards involved and requesting snowmobile dealers to distribute informational pamphlets on the capability and inherent dangers when these vehicles are operated. Excellent statewide newspaper editorials supporting MSMS were noted.

Michigan Women for Highway Safety is a new, independent association interested in and concerned about highway safety problems and needs. The Council approved a recommendation from the Committee to accept an invitation of the MWHS to be a support agency.

Resolution 21 of the 1970 MSMS House of Delegates directed "that physicians be urged to take leadership in providing training of those persons concerned with immediate care of the acutely ill and injured on a continuing basis."

Some current programs do not provide sufficient training hours and instruction in cardio-pulmonary resuscitation. Three excellent training programs were transmitted to presidents of all component medical societies for information.

The Committee is assisting in devising a hospital emergency capability survey conducted by the Michigan Department of Public Health, Michigan Hospital Association and the Greater Detroit Hospital Council, Incorporated.

The Chairman testified before a Michigan Senate Committee relative to the increasing number of injuries and deaths due to snowmobile accidents.

Other matters discussed were: The Michigan Department of State Medical Evaluation and Advisory Group; anticonvulsive legislation for epileptic drivers; responsibilities of physicians with problem drinkers; patient-physician confidentiality; physician's immunity from liability when reporting physical or mental impairment on a voluntary or compulsory basis and legislation.

Staff regularly attended meetings of the State Safety Commission and other appropriate organizations for the Committee's information.

Committee on Hospital Privileges

Francis P. Rhoades, MD, *Chairman*

The Council, at its meeting on May 26, 1971, approved a recommendation from the Committee after amending it to read:

> "That the Hospital Privileges Committee continue in existence and be directed to receive and investigate complaints from MSMS members in the field of hospital appointments and report valid complaints to The Council."

The Committee stands ready to assist any MSMS member who is dissatisfied with his present staff appointment and/or staff privileges, and it will continue to explore and seek ways to correct all inequities that are brought to our attention.

Committee on Legal Affairs

Kenneth H. Johnson, MD, *Chairman*

Legal Affairs Committee met five times prior to and early in the Legislative session, and will continue to meet as the Legislature takes up issues in the Autumn. The Committee's objectives in 1971 have been marked by reviews of bills affecting medicine, development of legislative postures for potential 1972 issues, and working with the volunteer Doctor-of-the-Week program.

Early in the session the Committee requested a Legislative Study of the medical malpractice action problem. This effort was successful through the adoption of Senate Concurrent Resolution 18, creating a 12-member Legislative Study Committee which will take up its study during the interim between sessions. Senator L. Harvey Lodge (Waterford) is Chairman of the legislative group; Representative J. Robert Traxler, (Bay City) is Vice-Chairman. Pending the Study which will, by direction of the resolution, have medical advisors, Legal Affairs Committee took no direct action on specific bill requests.

The Legal Affairs Committee also met early in the year with C. Allen Payne, MD, President, Board of Registration in Medicine, and Mr. Charles Harmon, Director State Department of Licensing and Regulation, for discussions on a proposed revised Medical Practice Act and proposed legislation establishing the working category of Physician's Assistant. The Committee thoroughly reviewed the Board's proposal to revise and alter the Medical Practice Act, and made recommendation to The Council for additions and changes. Subsequently, the Board of Registration took note of MSMS recommendations, and appears at this time prepared to seek introduction into the Fall Session a new Medical Practice Act. Principal advantages of the proposal include modernization of language (the current Act was first enacted in 1899), provision for physician's assistants, provision for limited licensing of certain physicians, provision for suspension or revocation of licenses due to natural disease or addiction that affects the practice of medicine, and provision for some public representation on the Board or advisory to it. Legal Affairs Committee will again review the proposal when it is introduced in bill form, and make recommendation thereon.

Separate legislation to establish the category of "Physician's Assistant" was introduced in this Session of the Legislature without consultation with MSMS. Legal Affairs Committee established rapport with the bill's sponsor, Representative Jackie Vaughn (Detroit), and caused revision of the Vaughn bill to concur with principles established for Physician's Assistants under the proposed Medical Practice Act. Mr. Vaughn will re-introduce the bill in the Fall with MSMS support. The Committee, in its deliberations on Physician's Assistant legislation, co-sponsored with the Committee on Educational Liaison, a one-day conference for various parties interested in the bill. Among organizations represented were nurses, osteopathic physicians, Legislators, dentists, educators, and others.

The only health-related measure near passage as of this report (August 9) affects the re-registration fee of physicians and surgeons. Often the arena for spokesmen opposed to organized medicine, re-registration fee bills have been introduced in the past several years, and in 1971, with proponents of fees as high as $100 per year. Through counseling with legislators, it now appears certain that a package of bills affecting medicine, osteopathy, optometry and other health professionals, will be enacted by the current legislature establishing re-registration fees at $25.00 annually.

The reduction in Medicaid payments by 10 per cent through Executive Order, effective March 8, was of prime concern to the Committee, which sought to re-establish 100 per cent payments in the 1971-72 Fiscal Year. In this effort, the Committee presented to the House of Representatives' Appropriations Sub-committee on Social Services, three physicians who informed the sub-committee on the effects of the cutback and the problems of practicing under Medicaid constrictions. These were Doctor Robert E. Rice, MD, Chairman of the Committee on Governmental Medical Care Programs, from Greenville; Doctor Joshua Williams, MD, Detroit; and Doctor Leland Holly, MD, Muskegon. It was a highly informative hearing with the Legislature and the Committee commends the three physicians for their presentations.

A variety of measures pend before the Legislature as it enters the Fall Session in which MSMS has a proper concern. Among them are bills to extend the Good Samaritan concept; to provide for Certificate of Need from the Department of Public Health for hospital construction or conversion; to post highway signs directing travelers to nearby hospitals with full-time emergency services; to establish a closed regulatory system for dangerous substances (drug abuse); and others. Additionally, a special study committee on means of increasing family practice physicians has been requested and probably will begin its work. The latter adds to a legislative resolution urging Michigan's medical schools to create Departments of Family Practice.

Committee on Maternal and Perinatal Health

Richard T. Mellis, MD, *Chairman*

The Committee held meetings on September 17, 1970, January 7, 1971, April 14, 1971, and May 20-21, 1971.

The Annual Michigan Conference on Maternal and Perinatal Health was held for the tenth year and was again a successful postgraduate endeavor. The meeting was moved from Flint to Lansing in 1971.

The yearly postgraduate meeting for members of the Committee was held at the Michigan State University Biological Station at Gull Lake in May.

The Annual Professional and Lay Education Workshop was held on March 4 in Lansing on the subject of "Pregnancy and Population Problems."

The Committee continued its publication of desk reference cards for use by individual physicians and hospitals, sponsored the Conference for Expectant Parents, inaugurated the Placental Tissue Registry and continued its work in connection with perinatal mortality, maternal death case histories, abortion legislation and the Detroit Maternal and Infant Care Project.

Other matters reviewed by the Committee were: abortion in institutional settings, intensive care nurseries, PKU testing program, postpartum obstetrical bed needs and licensed obstetrical bed complement in Michigan's hospitals, rubella vaccine, the obtaining of information on birth certificates, cost of prenatal care, crib deaths, smoking and pregnancy, definition of perinatal mortality rates and comprehensive state health planning.

Committee on Medical Socio-Economics

Dale L. Kessler, MD, *Chairman*

At the request of The Council, the Committee studied the implications of the proposal for a uniform fee schedule for Medicaid patients that is embodied in House Bill 5305. We have recommended that in the event H.B. 5305 becomes law and MSMS is required to represent its members in fee negotiations, the 1968 MRVS with an appropriate conversion factor that reflects increases in the cost of medical practice be used as an interim bargaining vehicle until the new RVS becomes available. The Bureau of Economic Information has undertaken surveys on overhead costs and fees to support these possible negotiations. The Bureau is also generating additional data that will assist future MSMS efforts to insure that physicians are fairly compensated for services rendered under governmental medical care programs.

The Committee has spent a great deal of time monitoring the development of medical foundations and has recommended the establishment of an MSMS sponsored state foundation which in turn can assist and support county medical societies that wish to engage in experimentation with Health Maintenance Organizations. Both of these recommendations are being considered by The Council.

Committee on Mental Health

Benjamin Jeffries, MD, *Chairman*

The Committee met on December 4, 1970, and hosted a dinner-meeting for state legislators on May 12, 1971.

The Director of the Michigan Department of Mental Health reported on community mental health programs; use of psychologists and social workers in hospital administrative positions; increased programs for the mentally retarded and the multiple handicapped; parental reluctance to accept needed children's services; needed additional diagnosis and evaluation by physicians in Act 54 programs and psychiatric services under Medicaid.

The Director of the Michigan Legislative Committee to Revise the Mental Health Statutes provided a progress report. He emphasized that this endeavor will attempt to develop a single, comprehensive law designed to clarify the mental health statutes within the context of:

(1) admission and discharge of patients;
(2) patient's rights;
(3) financing; and
(4) administration of programs.

The Chairman responded to a copy of a letter written by the Chairman of the Comprehensive Health Planning Advisory Council to the Governor concerning the jurisdiction and utilization of the Department of Mental Health. The letter objected to the lack of a psychiatric representative on the State Comprehensive Health Advisory Council because no expertise was available to provide the necessary advice, counsel and participation about mental health illness and services in this program.

During the legislative dinner the following subjects were discussed: Congressional activity; internships and residencies in hospitals; the need to integrate psychiatry with other disciplines; expansion of Lafayette Clinic; Community mental health programs; insufficient funding; limited psychiatric benefits under Medicaid and improving liaison with state legislators.

Committee on Michigan Medical History

Irving F. Burton, MD, *Chairman*

This committee held one meeting on March 24, 1971 after several years of inactivity. It was agreed to get technical advice from the Michigan Historical Society and/or the University of Michigan Historical collections and then to consider further the possibilities of retaining a professional historian as a consultant. Exploratory work was started toward establishing an archival (depository) area at MSMS for the collection of Michigan medical Historical materials, etc.

Committee on Occupational Health

Duane L. Block, MD, *Chairman*

The committee met with the new Director of the Michigan Department of Workmen's Compensation for the purpose of establishing liaison and to explore areas where the committee could be of assistance. As a result of this meeting, the Director has requested the committee to consult with his Advisory Council on matters requiring medical expertise in occupational health and workmen's compensation.

The committee is confident that this new liaison will contribute to the solutions of the many problems existing in the administration of Workmen's Compensation in Michigan.

Committee on Postgraduate Medical Education

Harry A. Towsley, MD, *Chairman*

The Committee met on January 14, 1971, June 3, 1971 and August 19, 1971.

The main interest of the Committee during the past year was in working with its Subcommittee on Criteria for Postgraduate Education. There is a national trend toward requirement of participation in continuing medical education as a condition of membership in the State Medical Societies, or of Medical Relicensure. The Committee feels that if the State Society does not assume leadership in requiring its members to participate in continuing medical education, a third party might force such requirements upon the profession. The State Society should be playing a more active role in insuring participation of its members in continuing medical education.

In conclusion, the Committee is hopeful that the 1971 House of Delegates might wish to consider the matter.

The Committee conducted its usual spring and fall postgraduate programs throughout the state, and has approved the program for the autumn of 1971. Unless the Committee's budget is enlarged, however, there will be no 1972 spring postgraduate program.

The Committee has made recommendations concerning the AMA Board of Trustee's, Report F. entitled "Continuing Competence of Physicians."

Its Subcommittee on Computers has continued its study and has reported at every meeting of the Committee.

Committee on Professional Insurance Plans

Robert M. Stow, MD, *Chairman*

As directed by Resolution 6 of the 1970 House of Delegates, the Committee is conducting a study of available health plans for MSMS members and their employees. At the request of the Committee, Michigan Hospital Service, Michigan Medical Service and selected commercial health insurance carriers, are developing new optional coverages containing both deductible and co-insurance features. These programs will be considered by the Committee just as soon as they are approved by the Insurance Commissioner and become available.

The Committee has been monitoring the AMA efforts to reach an agreement with the CNA Insurance Group for the establishment of a sponsored Basic Professional Liability program. This initial agreement calls for CNA to offer insurance in certain selected states where there is a good chance for high physician participation because other companies have withdrawn coverage. The Council will hear a presentation from the AMA Insurance Division and Johnson and Higgins Insurance Consultants on September 15 to learn at first hand possible solutions to Michigan's professional liability insurance crisis.

Committee on Public Health

Louis R. Zako, MD, *Chairman*

The Committee met on February 25, 1971, on May 12, 1971 and on September 1, 1971 during the Annual Meeting of the Michigan Health Officers Association.

The Committee has had liaison with members of the Michigan Legislature, the Tuberculosis and Health Society of Wayne County, medical student representatives from Wayne State University, the Michigan Department of Public Health, the Ontario Medical Association, the Michigan TB and Respiratory Disease Association and the Michigan Association for Regional Medical Programs.

Following through on the 1970 House of Delegates resolution entitled "Disposal of Disposables," the Committee has developed a proposed letter to be sent out to all hospitals in Michigan. This letter is waiting approval by The Council.

The Committee is cooperating with the Ontario Medical Association and other State Medical Associations bordering on the Great Lakes on the problem of pollution of the Great Lakes Waterway. It is considering the sponsorship of a conference on the health aspects of pollution of the Great Lakes Waterway to be held in Michigan.

The Committee has reconfirmed its recognition of the importance of pollution control, within and without the organizational structure of government and encourages all individuals and groups to cooperate with, and assist and encourage in any way possible, all efforts of pollution control.

The Committee is further studying perishable product dating, methods of isolation of hepatitis patients, the advisability of the construction of nuclear power plants in Midland, a cooperative program with the Michigan Department of Public Health on gonorrhea control, and the MARMP proposed Chronic Respiratory Disease Program Plan.

Other matters under study by the Committee are: physical examination cards, environmental health, rubella immunization, aging, blood resources, respiratory disease, snowmobile deaths and injuries, smoking and health, diabetes, dangerous communicable diseases, and premarital examinations.

During the coming year the Committee on Public Health hopes to devote an increasing amount of its attention to the environmental health since the overwhelming consensus of the Committee membership is that the medical profession must play a leadership role in the whole question of the quality of our environment.

Committee on Public Relations

Thomas R. Berglund, MD, *Chairman*

The MSMS Committee on Public Relations has met regularly during 1970-71 to study possible ideas and to review progress on various public relations activities. The Committee met Jan. 6, March 24 and August 11, 1971; and several ad-hoc subcommittees met at various times. The Committee will meet again Sept. 22, 1971, which will become part of the 1971-72 committee work.

As in the past, the work of the Committee and the communications efforts of The MSMS Council are closely related by the MSMS staff and officers. Some other aspects of the MSMS work in the broad fields of communications and professional information appear in the Annual Report of The MSMS Council.

Improved communications with MSMS members: Many fine comments have been received from members about the new twice-a-month, yellow "Medigram" version of *Michigan Medicine.* Started on January 14, 1971, this one-sheet, news bulletin provides breaking information about Council decisions, about legislation, about socio-economic subjects, etc. The 24 Medigram issues during the year are being produced at the same cost as the 12 former four-page blue newsletters.

MSMS Membership Brochure: After considerable research and planning, MSMS published an attractive booklet to describe MSMS membership services and sent a copy to each member. Other copies are distributed to potential members, to new members, to medical students, etc.

Work with Press, Radio and TV News Departments: MSMS staff continued to issue periodic news releases to the media on pertinent subjects; continued to call news conferences in Detroit and Lansing to present the medical society point of view on issues such as the Physician Assistant movement; continued to provide background materials to the media to show medical progress on such problems as infant mortality, etc.; continued to work closely with the 21 science writers at the major Michigan newspapers; continued to coordinate activities with the Public Relations people for the various state and voluntary health agencies and associations; and continued to cooperate with the Public Relations staffers for the three medical schools. For the first time, MSMS and the Michigan Association of Osteopathic Physicians and Surgeons held a joint news conference in Lansing to protest the legislative cut in Medicaid reimbursements. Beginning this past year, MSMS now sends a set of newspaper clipping on various subjects to MSMS leaders to keep them informed about what is appearing in print on various subjects. As a new project, selected MSMS members and staff held conferences with editors of four major metropolitan Wayne-Macomb weekly newspaper chains to improve communications.

MSMS-WUOM Radio Series: The series of radio programs prepared by MSMS on various health subjects continued during the year, with the University of Michigan radio station, WUOM, taping the interviews and distributing them to about 30 Michigan radio stations. Plans have been developed to feature more MSMS leaders and reports about MSMS committee work during 1971-72, and component medical societies will be asked to encourage their local stations to carry the weekly program.

Career Recruitment: The MSMS Committee on Public Relations and communications department has an ongoing responsibility for career recruitment activities with teachers, counselors, Explorer Scouts, etc. MSMS purchased a new supply of the AMA "Horizons Unlimited" career handbook, and MSMS printed a new folder which lists the colleges, universities and hospitals which train the various physicians and health care paramedical associates. Both are available for distribution by MSMS, component societies and interested physicians to schools and related groups. MSMS continued to provide a special grant to the Michigan Health Council to operate the Health Careers Mobile to schools, fairs, community events, etc.

Community Health Week: MSMS and the Michigan Health Council provided assistance to component societies for special activities to mark the annual fall AMA-sponsored Community Health Week.

Distribution of AMA health pamphlets: Thousands of excellent brochures from the AMA were distributed by MSMS to conventions, conferences, workshops held in Michigan by specialty societies, voluntary health agencies, civic clubs, etc. The AMA drug education fliers were popular.

Component Society Cooperation: MSMS sent news articles regularly to the component medical societies for their journals. MSMS provided a "do-it-yourself PR scorecard" so county medical societies could evaluate various procedures for handling emergency care systems, press relations, public service projects, speakers bureau, etc. Assistance was given to many component societies on special projects. The MSMS Public Relations Committee now includes the public relations chairmen of some of the larger component societies and this has facilitated cooperation. The Public Relations chairmen of several Michigan medical specialty societies also are members of the MSMS committee.

Exploration of Services Available from Public Relations Firms: The Committee and staff has interviewed several public relations firms and this matter will be discussed further at the Sept. 22 committee meeting. Committee members generally feel that wise use of public relations specialists for specific projects could help MSMS take advantage of the many opportunities open in the larger metropolitan communities.

Committee on Rural Medical Service

Donald R. McCorvie, MD, *Chairman*

The Committee held meetings on October 21, and March 31, and voiced its concerns about rural medical manpower in various ways.

A workshop sponsored by the Committee brought together some special guests to hear reports from selected communities in need of doctors and several communities which have been successful in obtaining more doctors. The exchange itself was helpful to the participants and the committee will build future activities now on a firmer base.

The Committee cooperated with the MD Placement Service of the Michigan Health Council in several ways and the chairman served as a consultant at a Houghton-Hancock community meeting on doctor recruitment.

The Committee offered its assistance to other MSMS committees exploring ways to help medical students obtain financial assistance.

The chairman attended the 1971 AMA Rural Health Conference to observe the project which will be sponsored by the AMA in Michigan in 1974.

17. Reports of House of Delegates Committees

Committee on Certificates of Commendation

The MSMS House of Delegates in 1961 established the MSMS Certificates of Commendation. The original action instructed that the awards "may include both scientific and/or public service, and may be awarded to one or several physicians annually who distinguish themselves in the medical profession."

The 1962 House of Delegates presented the first four such awards, and a number of awards have been recommended each year by committees and approved by the delegates. A complete list of awardees is attached for the review of the delegates.

This year, the Committee sent two invitations to each component county medical society inviting nominations. The Committee carefully evaluated 14 physicians, who had been recommended. The selection was most difficult.

The Committee is proud this year to present the names of six distinguished Michigan physicians for Certificates of Commendation. They are:

Eugene R. Elzinga, MD, Marquette
Tommy N. Evans, MD, Detroit
John V. Fopeano, MD, Kalamazoo
Leland E. Holly, Sr., MD, Muskegon
James M. Kennary, Sr., MD, Detroit
Lionel F. Swan, MD, Detroit

Biographical information about each nominee follows:

Eugene R. Elzinga, MD, Marquette

Eugene R. Elzinga was born May 31, 1897, in Zeeland, Michigan and attended the University of Virginia and the University of Michigan, where he received his MD degree in 1922. After internship at the University of Michigan, he served a residency in orthopedic surgery at the St. Louis Unit of the Shriners Hospital for Crippled Children.

Doctor Elzinga began medical practice as city physician in Flint in 1924 and moved to Marquette in 1934. For the first 15 years of his practice in Marquette, he was the only orthopedic specialist in the upper peninsula.

Doctor Elzinga is a Fellow of the American College of Surgeons, the American Academy of Orthopedic Surgeons and the American Academy for Cerebral Palsy. He is a member of the Clinical Orthopedic Society and he is past president of the Michigan Orthopedic Society. He is also a past-president of the Marquette-Alger Medical Society. He recently served a term as a member of the MSMS Council.

He is on the active staff of St. Luke's Hospital in Marquette, and on consulting staffs of St. Mary's Hospital in Marquette, I. A. Bell Hospital in Ishpeming and Munising Hospital in Munising.

Doctor Elzinga has won praise from his associates for his care and concern for all patients and especially children with orthopedic problems.

* * *

Tommy N. Evans, MD, Detroit

Tommy N. Evans, acting dean of the Wayne State University School of Medicine, was born in Batesville, Ark., April 12, 1922. He attended Duke and Baylor Universities before beginning medical studies at Vanderbilt University, where he received his medical degree in 1945. He interned at the University of Michigan in 1945 and 1946 and returned in 1948, after service with the Navy, for a residency in obstetrics and gynecology. He has been professor and chairman of the department of obstetrics and gynecology at Wayne State since 1965. He formerly was on the University of Michigan Medical School faculty.

He is a Diplomate of the American Board of Obstetrics and Gynecology and examiner for the board; past president, Michigan Society of Obstetrics and Gynecology; past president, N. F. Miller Gynecological Society, and a member of the executive council of the American Gynecological Society. He is affiliated with Harper, Hutzel, and Detroit General Hospitals in Detroit.

Doctor Evans is the author of 49 scientific articles that have appeared in medical journals and also has contributed sections to three textbooks. He served as consulting editor for Surgery, Gynecology & Obstetrics from 1961-65.

Doctor Evans also has served as vice chairman of the Michigan State Medical Society's Committee on Maternal Health, on the Committee on Family Planning of the American Public Health Association, and as a member of the board of trustees of the Michigan Cancer Foundation.

He has earned the respect of the medical, educational, business and industrial communities for his leadership in the development of the new Detroit Medical Center.

* * *

John V. Fopeano, MD, Kalamazoo

John V. Fopeano was born July 3, 1902, in Hoboken, N. J. He was graduated from Emory & Henry College in 1922, with an A.B. degree, and received his medical degree in 1925 from the University of Michigan Medical School, where he also served as an intern and as a resident in internal medicine. Doctor Fopeano retired from practice in 1969 after 38 years in the practice of internal medicine. He continues to serve as director of Out-Patient Clinics at Borgess Hospital, Kalamazoo.

In February, 1971, Doctor Fopeano was honored by the Kalamazoo Academy of Medicine as "Kalamazoo's Senior Medical Statesman".

Doctor Fopeano has served as an instructor at the University of Michigan, as a University of Michigan Health Service physician, and as an associate in neuropsychiatry at the Battle Creek Sanitorium. He is a past president of the Kalamazoo Academy of Medicine, a former member of the Michigan Advisory Council on Problems of Aging, and a Life Member of the American College of Physicians.

Doctor Fopeano served as chief of staff of Borgess Hospital in 1962-64 and for several years as chief of the internal medicine section at Bronson Hospital, Kalamazoo. He served as an active and reserve officer in the Air Corps, later the Air Force Medical Corps, from 1942 until 1955.

Doctor Fopeano is active in community affairs, as vice president of the Senior Citizens Fund, program committee member for the Kalamazoo Mental Health Center, worker in the Community Chest, and chairman of the medical advisory board of the Kalamazoo Visiting Nurses Association.

* * *

Leland E. Holly, Sr., MD, Muskegon

Leland E. Holly was born July 30, 1896, in Woodland, Michigan, and received his bachelor of arts degree from Albion College before entering the University of Michigan, where he received his MS degree in 1920 and his MD in 1921. He spent two years as an instructor at the University of Michigan and three years in general practice in Hastings, before becoming an associate in radiology, his specialty since 1926, at Blodgett Hospital, Grand Rapids.

Doctor Holly is affiliated with Hackley Hospital, Muskegon, as radiologist, having served as chief of his department until 1968. He also has been radiologist on the staffs of the following hospitals: Oceana County, Hart; Lake Shore Community, Shelby; Paulina Stearns (Ludington Memorial), Ludington; Sisters of Mercy, Manistee; Gerber Memorial, Fremont; and Mercy, Muskegon.

Doctor Holly was honored in 1957 as the American Cancer Society's "Man of the Year" for distinguished service in cancer control in Michigan. He is the author of numerous articles for medical and scientific journals. He presently serves on the Michigan Cancer Coordinating Committee, the Committee on Trauma of the American College of Surgeons, and on the Board of Directors and Executive Committee of the Michigan Division of the American Cancer Society.

He is a Diplomate of the American Board of Radiology and a Fellow of the American College of Radiology, the American College of Physicians and the American Medical Association. He is a past president of the Muskegon County Medical Society and has served as a delegate to MSMS. He is a former member of the Michigan State Board of Registration in Medicine. He also is past president of the Michigan Association of Roentgenologists, now the Michigan Radiological Society. He also has contributed his leadership to many community and civic groups.

* * *

James M. Kennary, Sr., MD, Detroit

James M. Kennary was born in Detroit, August 15, 1904, and received his BS from the University of Detroit before entering the St. Louis University College of Medicine, where he was graduated in 1929. He interned at Providence Hospital and has completed postgraduate work at the University of Michigan.

Doctor Kennary has been in general practice in Detroit since 1930 and belongs to the American Academy of General Practice, Phi Beta Pi, and the Catholic Physicians Guild. He has been a member of the Wayne County Medical Society Ethics Committee since 1953 and a delegate to MSMS since 1966. He is an attending physician at Detroit Memorial and St. John's Hospitals in Detroit and Bon Secours Hospital in Grosse Pointe and on the courtesy staff of Jennings Memorial Hospital, Detroit.

Doctor Kennary's professional lifetime of service is marked by his own successful battle against a serious medical problem. In February, 1946, he underwent a laryngectomy, afterwards returning to his full general practice. Since that time he has been very active in the Detroit area in working with persons who are about to undergo laryngial surgery. He has contributed countless hours in rehabilitation efforts with post-operative patients and has offered great inspiration to many.

Doctor Kennary has served as a family physician for more than 40 years on the east side of Detroit, with offices at 15701 East Warren and presently at 4900 Cadieux Road.

* * *

Lionel F. Swan, MD, Detroit

Lionel F. Swan was born April 1, 1906, in Trinidad, British West Indies, and received his early education there and in New York City. He received his bachelor's degree from Howard University in 1932 and his medical degree from Howard's College of Medicine in 1939. After training at Homer G. Phillips Hospital, St. Louis, and the Veterans Administration Hospital in Tuskegee, Ala., Doctor Swan practiced in Birmingham, Ala., for 18 years before establishing a practice in Detroit in 1951.

A member of the American Academy of General Practice, WCMS, MSMS and AMA, he is affiliated with Evangelical Deaconess, Alexander Blain, and Burton Mercy Hospitals, Detroit.

Doctor Swan has served as president of the National Medical Association, the National Medical Association Foundation, and the Detroit Medical Society. He has been the recipient of numerous awards for his community service as well as professional achievements. In 1963, he was honored by the Detroit Medical Society and the Detroit Alumni of Howard University as "Citizen of the Year" and by the Detroit NAACP Chapter as "Man of the Year". The Detroit Common Council gave him special citations in

1967, and in 1970 he received the Booker T. Washington Trade Association's Brotherhood Award and an award from the Michigan Health Council for service to youth.

In 1971, Doctor Swan has seen the product of his leadership in marshalling private efforts to improve medical care in the inner city. When the Detroit Medical and Surgical Center opened in June, he was praised as the man most responsible for making it possible.

MSMS Certificates of Commendation have been presented by the MSMS House of Delegates to the following distinguished physicians since the award was originated in 1961:

1962 J. W. Conn, MD, Ann Arbor
G. D. Cummings, MD, Lansing
C. S. Kennedy, MD, Detroit
R. L. Novy, MD, Detroit
1963 F. D. Dodrell, MD, Bloomfield Hills
C. J. Jentgen, MD, Detroit
J. M. Sheldon, MD, Ann Arbor
H. H. Stryker, MD, Kalamazoo
1964 Goldie Corneliuson, MD, Lansing
J. S. DeTar, MD, Milan
R. M. Heavenrich, MD, Saginaw
N. F. Miller, MD, Ann Arbor
E. G. Upjohn, MD, Kalamazoo
O. R. Yoder, MD, Ypsilanti
1965 F. J. Hodges, MD, Ann Arbor
T. Leucutia, MD, Detroit
R. J. Robinson, MD, Detroit
1966 A. C. Curtis, MD, Ann Arbor
L. L. Davis, MD, Mt. Pleasant
Mark Marshall, MD, Ann Arbor
H. J. Meier, MD, Coldwater
R. H. Pino, MD, Detroit
A. B. Swanson, MD, Grand Rapids
H. A. Towsley, MD, Ann Arbor
1967 F. J. Busch, MD, Saginaw
W. H. Huron, MD, Iron Mountain
F. J. Margolis, MD, Kalamazoo
D. I. Sugar, MD, Detroit (posthumously)
R. W. Waggoner, MD, Ann Arbor
C. H. Wright, MD, Detroit
1968 A. F. Barbour, MD, Flint
H. L. Clark, MD, Ludington
J. M. Dorsey, Sr., MD, Detroit
F. C. Sabin, MD, Marquette
W. D. Towsley, MD, Midland
1969 H. A. Furlong, MD, Pontiac
W. W. Jack, MD, Grand Rapids
A. C. Kerlikowske, MD, Ann Arbor
R. C. Prophater, MD, Bay City
A. L. Tuuri, MD, Flint
C. M. Vasu, MD, Grand Rapids
1970 H. E. Branch, MD, Flint
M. Clapper, MD, Detroit
H. F. Falls, MD, Ann Arbor
H. W. Harris, MD, Lansing
R. E. Rice, MD, Greenville
Sarah Schooten, MD, Detroit

THE HOUSE, acting as a committee of the whole, approved the report of the Committee. Subsequently, at the Tuesday evening banquet, Certificates of Commendation were presented to Doctors Elzinga, Evans, Fopeano, Holly, Kennary, and Swan.

Committee on Constitution and Bylaws

David J. Millard, MD, *Chairman*

The 1970 House of Delegates passed on first reading the following changes in the MSMS Constitution and Bylaws and they are herewith presented for final action:

CONSTITUTIONAL CHANGES

Article IX, Section 3. (The last sentence to be changed to read):

"The Secretary, Assistant Secretary, Treasurer, and Assistant Treasurer shall be nominated by The Council and elected by The House of Delegates in the manner and for such terms as are prescribed by the Bylaws."

Article X, Section 1. (The following sentence to be inserted between the second and third sentences of the present Section):

"The Chairman of the delegates to the AMA, or his designated alternate, shall serve on The Council as an ex officio member."

BYLAWS CHANGES

Chapter 9, Section 12. (Changed to read):

"Election of Officers — Election of officers of the Society shall take place at the last meeting of the House of Delegates at each Annual Session. All nominations shall be made from the floor of the House, with the exception of Secretary, Assistant Secretary, Treasurer, and Assistant Treasurer who are nominated by The Council. If there be only one nomination for any office, the candidate so nominated may be elected viva voce."

Chapter 10, Section 1. (Changed to read):

"Organization — The Council is the executive body of the Society. Subject only to the following, it shall determine the times and places of its meetings. It shall nominate candidates for Secretary, Assistant Secretary, Treasurer and Assistant Treasurer to be elected by the House of Delegates who shall serve for a term of office of one year or until a successor is elected and takes office. It shall hold an Annual Meeting in January of each year at which time it shall elect an Editor of the Journal of the Michigan State Medical Society, to take office immediately and to serve for a term of one year or until his successor is elected and takes office . . ."

* * *

During the course of the year, it was pointed out to our Committee that Bylaws Chapter 14, Section 5 (re status of section delegates) does not conform to Chapter 9, Section 1, as amended by the House in 1970.

Therefore, we recommend that Chapter 14, Section 5, last sentence, be amended to read:

"At the first annual meeting held by a section and thereafter at each alternate annual meeting, it shall elect a delegate and an alternate delegate to the House of Delegates of the Society, such delegate and alternate delegate to serve for terms of two years each."

This eliminates the words "and to have the status, when seated, of an ex-officio member of the House of Delegates as provided in Sec. 2 of Chapter 9 of these Bylaws."

I would also request that the House waive the requirement that this amendment be laid over one year, and take immediate action on the amendment.

* * *

The present Bylaws do not precisely cover the possibility that a President-Elect may become disabled before he can take office, as witness Chapter 13, Section 4: "Should the office of President become vacant, the President-Elect shall succeed to the Presidency for the unexpired term. Should the office of President thereafter again become vacant, The Council, at a regular or special meeting, shall elect a President to serve until the next Annual Session of the Society."

Therefore this 1971 Committee recommends that consideration be given to the creation of a Vice President position, almost entirely titular, who could become President, under the present Bylaws, only if the President-Elect becomes disabled. Or, the Bylaws could be changed to put a Vice President in rotation ahead of the President-Elect in the case of the President's disability. This would require some changes in Section 4 of Chapter 13 and the addition of another section.

The Vice President could perform such duties as the President may from time to time delegate to him and aid in the public and ceremonial functions of his office.

The AMA has such an official and provision in its Bylaws and it seems worthy of consideration by MSMS. Therefore, the House may wish to authorize its 1972 House of Delegates Committee on Constitution and Bylaws to study and report on this subject.

* * *

The House may wish to consider the possibility of making provision for the House of Delegates to vote by mail ballot. Chapter 9, Section 8 (b) of the Bylaws provides that the House of Delegates may adopt rules and regulations for its own government and for the administration of the affairs of the Society. Nevertheless it might be appropriate to handle the question of a mail ballot by a separate section. It would be logical to (a) make this a subparagraph (i) of Section 8 or (b) to insert a new section before Section 9 or (c) to put it after Section 14, before Rules of Order.

If the House wishes to make such a provision, your Committee recommends adoption of the following language, to be inserted in the appropriate place in the Bylaws:

> "Notwithstanding any other provision of Chapter 9 of these Bylaws, the House of Delegates may, when not in session, conduct a mail ballot concerning any proposition or thing other than the elections required in Section 10 and 12 of this Chapter 9. Such mail ballot may be conducted by the Speaker at any time upon a two-thirds vote of The Council or on petition of twenty-five percent of the seated delegates. Such mail ballots shall be conducted by registered or certified mail and shall be conducted with such other safeguards as the Speaker deems appropriate."

THE REFERENCE COMMITTEE on Constitution and Bylaws, Stuart M. Gould, MD, Chairman, recommended approval of Recommendation 1, embracing a Constitutional change in Article IX, Section 3. (The last sentence to be changed to read): "The Secretary, Assistant Secretary, Treasurer, and Assistant Treasurer shall be nominated by The Council and elected by the House of Delegates in the manner and for such terms as are prescribed in the Bylaws."

THE HOUSE approved this recommendation of the Reference Committee.

THE REFERENCE COMMITTEE recommended approval of Recommendation 2, embracing Constitutional change in Article X, Section 1. (The following sentence to be inserted between the second and third sentences of the present section): 'The Chairman of the Delegates to the AMA, or another member of the delegation, designated as his substitute, shall serve on The Council as an ex officio member.' (Clarification in wording was approved by MSMS Legal Counsel as not representing a substantive change.)

THE HOUSE approved this recommendation of the Reference Committee.

THE REFERENCE COMMITTEE recommended approval of Recommendation 3, embracing Bylaws changes as follows:

CHAPTER 9, Section 12. (Changed to read):

"ELECTION OF OFFICERS—Election of officers of the Society shall take place at the next meeting of the House of Delegates at each Annual Session. All nominations shall be made from the floor of the House, with the exception of Secretary, Assistant Secretary, Treasurer, and Assistant Treasurer who are nominated by The Council. If there be only one nomination for any office, the candidate so nominated may be elected viva voce."

CHAPTER 10, Section 1. (Changed to read):

"ORGANIZATION—The Council is the executive body of the Society. Subject only to the following, it shall determine the times and places of its meetings. It shall nominate candidates for Secretary, Assistant Secretary, Treasurer and Assistant Treasurer to be elected by the House of Delegates who shall serve for a term of office of one year or until a successor is elected and takes office. It shall hold an Annual Meeting in January of each year at which time it shall elect an Editor of the Journal of the Michigan State Medical Society, to take office immediately and to serve for a term of one year or until his successor is elected and takes office. . ."

THE HOUSE approved this recommendation of the Reference Committee.

THE REFERENCE COMMITTEE recommended approval of: Recommendation 4, embracing changes in Chapter 14, Section 5. (Last sentence amended to read): 'At the first annual meeting held by a section and thereafter at each alternate annual meeting, it shall elect a delegate and an alternate delegate to the House of Delegates of the Society, such delegate and alternate delegate to serve for terms of two years each.'

This eliminates the words 'and to have the status, when seated, of an ex-officio member of the House of Delegates as provided in Sec. 2 of Chapter 9 of these Bylaws.'

The Committee recommends approval of the standing committee's request to waive the requirement that this amendment be laid over one year, and that immediate action be taken on this amendment (requiring three-quarters affirmative vote of the House of Delegates).

THE HOUSE approved this recommendation of the Reference Committee and by a three-quarters vote, the rules were suspended and the foregoing Bylaws change was given immediate effect.

THE REFERENCE COMMITTEE recommends that Recommendation 5, embracing changes in Chapter 13, Section 4 of the Bylaws, as included in the latter half of Page 2 of the Standing Committees Report relative to establishing a Vice-President position, be referred back to the Standing Committee on Constitution and Bylaws. It also recommended that provision for succession of a President-Elect disabled prior to his inauguration as President be considered by the Standing Committee. The Committee felt that the Speaker of the House of Delegates is a logical successor to the President-Elect, in view of his experience. (He would be succeeded by the Vice-Speaker of the House of Delegates, and would have been elected by the House of Delegates.)

THE HOUSE approved this recommendation of the Reference Committee.

THE REFERENCE COMMITTEE recommended disapproval of Recommendation 6 addressing itself to the establishment of a procedure for mail ballot of the House of Delegates, because items of sufficient importance to require a mailed ballot should first receive full discussion and deliberation by a regular or special meeting of the House of Delegates. This argument supports current proposals establishing two regular meetings per year of the House of Delegates. Also two adequate mechanisms for referendum are provided for in Chapter 15 of the Bylaws. (See Sections 1 and 2.)

THE HOUSE approved this recommendation of the Reference Committee.

RESOLUTIONS

● RESOLUTION 1

Quorum for MSMS House of Delegates
Frank B. Walker, MD, Wayne County

House Action: Disapproved

Whereas, the action of Michigan State Medical Society House of Delegates should have the support of the majority of the delegates, the elected representatives of the physicians of Michigan, and

Whereas, Chapter 9, Section 7 of the Michigan State Medical Society Bylaws establish a quorum as "not less than 40 percent of the accredited delegates", and

Whereas, on the basis of the present membership of the Michigan State Medical Society House of Delegates of 187 this quorum constitutes 75 members and by majority vote authorized 39 delegates to formulate policy and establish rules and regulations for almost 8,000 physicians in Michigan; therefore be it

RESOLVED: That Chapter 9, Section 7 be amended to read as follows: "A quorum of the House of Delegates shall consist of not less than two-thirds of the accredited delegates, provided that a majority of such quorum shall not come from any one component county society."

● RESOLUTION 2

Medicaid Performance, Surveillance, and Utilization Report System
Ralph R. Cooper, MD, Wayne County

House Action: Disapproved

Whereas, in 1966 the House of Delegates of the American Medical Association warned against utilization review by a government agency: "If, as an alternative, utilization review is permitted to become the function of a government agency, the prospect is that such review may not be performed by qualified individuals. This could result in detriment to the welfare of patients and undue interference with the practice of medicine,"* and

Whereas, in 1969 the House of Delegates of the American Medical Association adopted a policy statement recommending the "retaining professional control in patient-physician fiscal and economic relationships" in peer review**, and

Whereas, in 1966 the House of Delegates of the Michigan State Medical Society withdrew support of the "Hospitalization Utilization Review Manual" and advised The Council that "in the future, such far-reaching decisions which actually alter medical practice, must not be made without adequate discussion and approval by the House of Delegates," and

Whereas, in 1967 The Council of the Michigan State Medical Society adopted Principles of Utilization which recognize that "uniform standards cannot be applied to all communities" and that "utilization involves the evaluation of medical services and a final decision must be based on medical judgment. Therefore a utilization control program must be directed by physicians," and

Whereas, in November, 1970 The Council of the Michigan State Medical Society voted to supply consultants to the Medicaid Performance, Surveillance, and Utilization Report System, developed by the Michigan Department of Public Health under contract from the Department of Social Services, and

Whereas, in June, 1971, the House of Delegates of the American Medical Association reaffirmed "that peer review should be considered a professional function and as such should be carried out by or under sponsorship of the county or state association," and

Whereas, participation by the Michigan State Medical Society in the Medicaid Performance, Surveillance, and Utilization Report System is in contradiction to the established policies of the American Medical Association and the Michigan State Medical Society; therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society instruct The Council to withdraw its support and participation in the Medicaid Performance, Surveillance, and Utilization Report System and notify its designated consultants of this action, and be it further

RESOLVED: That The Council be hereby advised of its failure to adhere to the established policies of the American Medical Association and the Michigan State Medical Society, and be it further

RESOLVED: That The Council invite the Department of Public Health and the Department of Social Services to utilize existing peer review programs of the Michigan State Medical Society and its component medical societies.

● RESOLUTION 3

Appointment of Committee to Consider Two House Meetings a Year
Robert J. Mason, MD, Immediate Past President
(for The Council)

House Action: Following Substitute Resolution Adopted in Lieu of Resolutions 3 & 4.

Whereas, the rapidly changing demands in delivery of health care may well necessitate a second meeting of the House of Delegates in the year, and

Whereas, a Spring meeting would enable the House to provide better instructions for the Michigan Delegates to the AMA Annual Meeting in June; therefore be it

RESOLVED: That there be two meetings of the House of Delegates — one in the spring and one in the fall.

● RESOLUTION 4

Change of Dates for Annual Meeting of the House of Delegates
Robert J. Mason, MD, Immediate Past President
(for The Council)

House Action: Substitute Resolution Adopted in Lieu of Resolutions 3 & 4. See Resolution 3

● RESOLUTION 5

Establishment of Michigan State Medical Society Malpractice Judicial Panel
John W. Grigg, MD, Section on Otolaryngology

House Action: No Action

Whereas, malpractice suits have substantially increased in Michigan and have become a matter of growing concern to the medical profession, especially the observable tendency of the courts to return greater and more frequent awards against physicians, and

Whereas, the two major insurance carriers in Michigan have suspended underwriting new policies causing new physicians to encounter difficulty acquiring malpractice insurance, and

Whereas, malpractice insurance premiums have immensely increased, and

Whereas, practicing "defensive medicine" has increased medical costs and deteriorated physician-patient relationships, and

Whereas, the medical profession must attempt to effect a remedy; therefore be it

RESOLVED by the Michigan State Medical Society House of Delegates to establish a malpractice judicial panel to consist of three physicians and two consultant attorneys whose purpose shall be advisory. The panel shall review threatened or instituted malpractice suits with Michigan State Medical Society defendant physicians, and their attorneys but not plaintiffs, or plaintiff's attorneys. The panel may also assist in the preparation of defense where feasible. The advice of the panel is not binding to physician or insurance carrier, and be it further

RESOLVED by the Michigan State Medical Society House of Delegates to request the Michigan State Medical Society Insurance Committee to investigate the feasibility of one insurance carrier for Michigan State Medical Society members.

Report of Board of Trustees CC

***Report F of The Council on Medical Services: "The Medical Profession and Peer Review"*

● RESOLUTION 6

Establishment of a Uniform Fee Schedule for Medicaid Payment
D. Bonta Hiscoe, MD, for the Ingham Delegation

House Action: Following Substitute Resolution Adopted in Lieu of Resolutions 6 & 20.

Whereas, Medicaid payments for physician services have been held by the Michigan Department of Social Services at or below 1968 usual and customary charges, and

Whereas, these fees for physicians' services were temporarily and arbitrarily cut 10% by the Department of Social Services, and

Whereas, fiscal responsibility has not been possible under the "usual, customary and prevailing" payment philosophy, and

Whereas, actuarially accurate estimates are at best extremely difficult if not impossible using this method of payment, and

Whereas, it is totally illogical and discriminatory to have a payment system that pays unequal amounts of money to equally well trained physicians who have provided identical services within the same office, city, county or different geographical areas of the state; therefore be it

RESOLVED: That The Council do everything in its power to have established a revised Medicaid payment system which would include a Uniform Fee Schedule for all services and procedures, and be it further

RESOLVED: That the most recently approved Michigan Relative Value Scale be used to determine the relative value payment for each service rendered, and be it further

RESOLVED: That future adjustments in payments be made in relation to the alteration of costs of delivery of health services on an annual basis.

● RESOLUTION 7

For Continuing Physician Education for Relicensure
Harold F. Falls, MD, Washtenaw County

House Action: Adopted as Amended

Whereas, state medical societies and governmental agencies have shown recent interest in developing programs to ensure that practicing physicians maintain their competence, and

Whereas, state medical societies in Oregon, Pennsylvania, and Arizona have adopted continuing education requirements for membership, and

Whereas, the Medical Society and Legislature of the State of New Mexico have approved a plan of continuing medical education requirements for relicensure, and

Whereas, the Postgraduate Education Committee of the Michigan State Medical Society recently recommended a program of continuing medical education requirements for reregistration; therefore be it

RESOLVED: That this House of Delegates instruct the Speaker to appoint an ad hoc task force to review the proposal submitted by the Postgraduate Education Committee, and be it further

RESOLVED: That this ad hoc task force undertake to revise or modify that proposal as it deems appropriate and submit a detailed series of final recommendations for consideration by the 1972 House of Delegates.

● RESOLUTION 8

Drug Abuse
Kornelius Van Goor, MD, Kent County

House Action: Adopted as Amended

Whereas, drug abuse is increasing at alarming rates, especially among teenagers, and

Whereas, amphetamines are a group of drugs widely abused for their stimulant effects, often resulting in a drug dependency, and

Whereas, many of physician's prescribed Amphetamine preparations reach the illicit drug market through illegal channels, and

Whereas, there are few specific, well-recognized medical indications for the use of amphetamines, for example, narcolepsy, hyperkinesis and certain psychiatric disorders, and

Whereas, physicians have been challenged to assume leadership in combating drug abuse; therefore be it

RESOLVED: That the Michigan State Medical Society urge a voluntary statewide moratorium on the prescription of amphetamines for diet control.

● RESOLUTION 9

Proxy Vote
Ned I. Chalat, MD, Wayne County

House Action: Disapproved

Whereas, a delegate may be unable to attend the session of the House of Delegates at which elections are held for the officers and councilors of the Michigan State Medical Society and delegate and alternate delegate to the American Medical Association, and

Whereas, an alternate delegate may not be available on short notice, particularly when the delegate who leaves is from a county distant from the city where the House meets, and

Whereas, when a delegate is unable to be present and an alternate is not seated in his place, 50 members of Michigan State Medical Society are deprived of their representative votes, and

Whereas, it is customary to allow vote by proxy when the meeting is not a deliberative body; therefore be it

RESOLVED: That at the election of the House of Delegates of the Michigan State Medical Society an absentee delegate be authorized to vote by proxy for MSMS officers, councilors and AMA Delegates and alternates, and be it further

RESOLVED: That the Bylaws of the Michigan State Medical Society be amended by addition of the following wording in Chapter 9, Sections 10, 11 and 12: "Any delegate not replaced by an alternate may cast his vote by properly certified proxy."

● RESOLUTION 10

Restructure of MSMS Councilor Districts
Paul J. Connolly, MD, Wayne County

House Action: Disapproved

Whereas, the principle of "one man - one vote" is fundamental to the democratic process, and

Whereas, the areas in Michigan with the greater densities of the physician population are not at present proportionately represented in the House of Delegates of the Michigan State Medical Society nor in The Council of the Michigan State Medical Society, nor in the Delegation from Michigan to the House of Delegates of the American Medical Association; therefore be it

RESOLVED: That the Speaker of this House of Delegates appoint an ad hoc committee of which the membership is to be on the basis of the density of physician population in this State to study the restructuring of Councilor Districts to be more representative of the "one man - one vote" principle, and be it further

RESOLVED: That this committee report its findings and recommendations, together with suitable Constitution and Bylaw changes to implement them, to the 1972 meeting of this House of Delegates.

● RESOLUTION 11

Responsibilities of MSMS President
Robert D. Allaben, MD, Wayne County

House Action: Disapproved

Whereas, the Bylaws of the Michigan State Medical Society stipulate that the President "shall be the general executive officer of the Society," and

Whereas, The Council, the executive body of the Michigan State Medical Society, elects its own chairman, and

Whereas, the President is only an ex-officio member of The Council with the right to vote and has the right to speak but not to vote in the House of Delegates, the policy-making body of the Society, and

Whereas, an organization must have strong leadership to be effective, and

Whereas, the present restrictions on the rights of the President make it impossible for the President to carry out his obligation as executive officer, and

Whereas, the President is elected by the House of Delegates, which is the duly elected representative of the membership; therefore be it

RESOLVED: That the Committee on Constitution and Bylaws of this House be instructed to prepare amendments to vest the President with the necessary authority, including the chairmanship of The Council, to enable him to exercise his responsibilities as the executive officer of the Michigan State Medical Society.

● RESOLUTION 12

Relation of MSMS with Michigan Congressmen
Irvin A. Wilner, MD, Wayne County

House Action: Adopted

Whereas, the President, the Congress, the health professions and the public are concerned about health care services, and

Whereas, the President and Congress are considering national health programs which are now only in a development stage; therefore be it

RESOLVED: That this House of Delegates reaffirm authorization for the officers of the Michigan State Medical Society to meet with the Michigan members of Congress and offer overall counsel and leadership within proposed national health programs.

● RESOLUTION 13

Summary of Medical Laws
Gerald H. Mandell, MD, Wayne County

House Action: Adopted as Amended

Whereas, the number of state and federal laws which affect the practice of medicine are increasing annually, and

Whereas, it is essential that physicians have full knowledge of these laws so that they may adhere to the regulations contained therein, and

Whereas, there are many physicians, particularly young doctors entering practice, who are unaware of the current state laws pertaining to the practice of medicine, and

Whereas, there is no central source which physicians can check for information about medical laws; therefore be it

RESOLVED: That The Council of MSMS study available material and take appropriate action.

● RESOLUTION 14

Homicide Prevention
Benjamin Jeffries, MD, Wayne County

House Action: Adopted as Amended

Whereas, in view of the increasing violence in our society with the result that homicide deaths are now a significant contributor to national death rates comparable to a degree with suicide, war and vehicle death, and

Whereas, in view of the particular relationship of firearms to homicide and the accompanying threat to life and security, adding to the fears, anxieties and stresses of a crowded urban society, and

Whereas, punishment after the act has failed as a deterrent to homicide; therefore be it

RESOLVED: That the Michigan State Medical Society recommend to our governmental bodies that effective controls be placed on the assembly, manufacture and distribution as well as possession of hand guns and that legislation to this end be supported, and be it further

RESOLVED: That copies of this resolution be distributed to the Executive Office of the State of Michigan, the Legislature and appropriate local units of government.

● RESOLUTION 15

Physician Discrimination
E. S. Woodworth, MD, Livingston County

House Action: No Action

Whereas, federal legislation establishing Titles 18 and 19 was passed ostensibly to assure equal medical care for all citizens regardless of their ability to pay or the cost to the government, and

Whereas, organized medicine then and since has repeatedly cautioned against the astronomical costs of such legislation, and

Whereas, since its inception these predictions have proved to be true, and

Whereas, the greatest increases in costs to date have been incurred by health care providers other than physicians, and

Whereas, the Department of Social Services has seen fit to discriminate against physicians by freezing Medicaid fees at the 1968 level with a further reduction of 10% in March, 1971, and

Whereas, such action was done arbitrarily and without negotiation; therefore be it

RESOLVED: That the Livingston County Medical Society totally supports the resolution passed by the Ingham County Medical Society entitled "Discrimination in Medicaid Payments", and be it further

RESOLVED: That the Livingston County Medical Society requests the Michigan State Medical Society to act immediately through its legal counsel to challenge and attempt to stop this form of unconstitutional discrimination, and be it further

RESOLVED: That this society also requests Michigan State Medical Society to establish a Medical Foundation or other proper legal mechanism as soon as possible in order to develop a strong bargaining mechanism between physicians and third party payers.

● RESOLUTION 16

No Fault Malpractice Insurance
D. Bonta Hiscoe, MD, Ingham County

House Action: Adopted as Amended

Whereas, the judicial system in our country is so overburdened that decisions are inordinately slow in being made, and

Whereas, the process of litigation consumes large amounts of professional time which could be better spent practicing medicine (an urgent necessity at this time), and

Whereas, a large percentage of most settlements resulting from a malpractice action never gets to the patient, and

Whereas, the medical profession feels that if a patient has truly suffered unduly he should be compensated as fully and quickly as possible, and

Whereas, the current adversary system is badly over-used and abused; therefore be it

RESOLVED: That the Michigan State Medical Society investigate the feasibility of a no-fault insurance system.

● RESOLUTION 17

Computer Committee
Robert M. Stow, MD, Ingham County

House Action: Adopted as Amended

Whereas, computer systems have now been developed which conceivably will totally replace our present hospital and office records, and

Whereas, computer systems have been developed which can replace all information systems within any hospital, group or solo practice office, extended care facility, and

Whereas, accreditation requirements, rules of various agencies and even laws have been established which require maintaining specific "hard copy" records, signatures, etc., which are incompatible with the efficient use and record retention in a computer, and

Whereas, numerous companies are introducing "total" or "fragments" of various "diagnostic", "therapeutic" or "record" systems which may or may not be reliable or adequate, and

Whereas, physicians, the legislature, various agencies, and health departments need to be kept aware of the advantages, limitations, need for law and rule changes, as well as the dangers of improper disclosure in some systems; therefore be it

RESOLVED: That the Council establish a continuing committee charged with keeping abreast of developments in this field and advising The Council on need for legislation, changes in accreditation requirements and any other matters which would logically come before the committee.

● RESOLUTION 18

Studded Snow Tires for "Emergency" Vehicles
Robert M. Stow, MD, Ingham County

House Action: Disapproved

Whereas, the State Legislature is currently considering a new law to ban "studs" on snow tires, and

Whereas, certain "Emergency" vehicles such as police, fire, ambulance and physicians need to make calls at any time of day or night on any date of the year; therefore be it

RESOLVED: That the Michigan State Medical Society have introduced an amendment to the bill which will permit emergency vehicles including physicians to apply to their local police agency for a permit to use "studded" snow tires from November 1 to May 1 each year.

● RESOLUTION 19

Institution of Legal Action Against State of Michigan
John J. Rick, MD, Branch County

House Action: Following Substitute Resolution Adopted in Lieu of Resolutions 19, 21 & 27.

Whereas, the fiscal intermediaries have arbitrarily reduced Medicaid (Title XIX) payments to physicians, and

Whereas, Title XIX of the Medical Assistance Act specifically states that providers be compensated at the usual customary and reasonable rate; therefore be it

RESOLVED: That Michigan State Medical Society reaffirm its commitment to require the fiscal intermediary to compensate, in accordance with the existing law, the provider of medical service at his usual customary and reasonable rate.

● RESOLUTION 20

Contract with Michigan Department Social Services for Medicaid Services
Frank Pettinga, MD, Muskegon County

House Action: Substitute Resolution Adopted in Lieu of Resolution 6 & 20. See Resolution 6.

● RESOLUTION 21

Prohibition of Inequitable Prorating of Payment for Medicaid Services
Frank Pettinga, MD, Muskegon County

House Action: Substitute Resolution Adopted in Lieu of Resolutions 19, 21 & 27. See Resolution 19

● RESOLUTION 22

Lansing as the Annual House of Delegates Meeting Site
Frank Pettinga, MD, Muskegon County

House Action: No Action

Whereas, more than two-thirds of the physicians of the State of Michigan comprise "out-state physicians", and

Whereas, Lansing is nearer the center of the state and the site of MSMS headquarters; therefore be it

RESOLVED: That the annual meeting of the House of Delegates of MSMS be held in Lansing.

● RESOLUTION 23

Effort to Repeal or Modify MMS Enabling Act
Frank Pettinga, MD, Muskegon County

House Action: Disapproved

Whereas, the doctors of Michigan remain associated with the Michigan Medical Service through the enabling act, and

Whereas, the doctors of Michigan have indicated their desire for a disassociation, and

Whereas, the enabling act is discriminatory against all other insurance companies which do not enjoy the same advantages with the insurance commission; therefore be it

RESOLVED: That MSMS seek by all possible avenues and methods to have legislative modification or repeal of the Michigan Medical Service enabling act.

● RESOLUTION 24

Revision of Pharmacy Rules
K. T. McGunegle, MD, Sanilac County

House Action: Recommended this Resolution be Forwarded to the Liaison Committee with Michigan State Pharmaceutical Association for study and appropriate action.

Whereas, Michigan hospitals, as a requirement for licensure, must comply with the provisions of the Michigan laws relative to pharmacy published by the State of Michigan, Department of Licensing and Regulation, Board of Pharmacy, and

Whereas, the State of Michigan Board of Pharmacy requires that all hospitals dispense drugs only under the supervision of a registered pharmacist, and

Whereas, there is a great shortage of registered pharmacists, and this shortage creates a situation in which it becomes impossible for a hospital to dispense medicines to its patients for prolonged periods of time during each hospital day. Patient care and the delivery of medical services is thereby seriously hindered, and

Whereas, the intent of the law is surely to create a situation in which hospitals can assure accurate and timely administration of medicines to patients, and

Whereas, the Registered Nurse has over a period of many decades proven herself competent to administer medications to patients, and the Registered Nurse even now is legally responsible for proper administration, accurate recording, proper dosage, and the Registered Nurse legally shares responsibility with the doctor in many situations where a medication given is actually contra-indicated, and

Whereas, it seems reasonable that if the Registered Nurse is competent to carry out and be held legally responsible for the above, she should be considered competent to follow a doctor's written order to dispense medication from stock bottles to smaller individual patient containers without the aid of a registered pharmacist; be it therefore

RESOLVED: That the State of Michigan Board of Pharmacy provisions be amended to allow Registered Nurses to dispense medications, ordered by a qualified physician from hospital pharmacy stock bottles in the absence of a registered pharmacist; be it further

RESOLVED: That The Council through staff or committee take steps to have the offending provisions amended.

● RESOLUTION 25

Defense of Physician by Michigan State Medical Society
Richard C. Deming, MD, Jackson County

House Action: Adopted as Amended

Whereas, Michigan Medical Service (Blue Shield) has sent to its subscribers letters indicating it would defend such subscriber in any action that a non-participating physician might take to recover his fee for service rendered the subscriber, if Blue Shield deems the fee excessive and

Whereas, such action on Blue Shield's part is considered to be arbitrary and detrimental to the usual patient-physician relationship, and therefore be it

RESOLVED: That The Michigan State Medical Society through Peer Review mechanisms, shall review and, if indicated, support the physician in any action in which a third party participates to prevent the physician from obtaining his usual fee, provided the case has been reviewed and the physician supported by his local peer review committees.

● RESOLUTION 26

Non-Participation in Blue Shield Provider Contracts
Edward R. Weddon, MD, Jackson County

House Action: Disapproved

Whereas, Michigan Medical Service (Blue Shield) has sent to its subscribers letters indicating it would defend each subscriber in any action that a non-participating physician might take to recover his fee for service rendered the subscriber, if Blue Shield deems the fee excessive and

Whereas, such action on Blue Shield's part is considered to be arbitrary and detrimental to the usual patient-physician relationship; therefore be it

RESOLVED: That the Michigan State Medical Society recommend to the physicians of Michigan that they do not participate in a formal provider contract with Blue Shield.

● RESOLUTION 27

Payment of Usual and Customary Fee by Medicaid Fiscal Intermediary
Edward R. Weddon, MD, Jackson County

House Action: Substitute Resolution Adopted in Lieu of Resolutions 19, 21 & 27. See Resolution 19

● RESOLUTION 28

Consumer Committee
Thomas R. Berglund, MD, Kalamazoo

House Action: Adopted as Amended

Whereas, the individual practitioner of medicine, through his devotion to and concern for his patient, has been able to retain the highest position in the public's opinion while the image of the profession as a whole has declined, and

Whereas, this situation has been largely brought about by representations and utterances emanating from the Medical Associations, and experience shows that these are, for the most part, misinterpreted and considered as exhibiting a conflict of interest; and

Whereas, in other similar situations it has been found that lay citizens, speaking for a profession, are vastly more impressive and their effect more pronounced; therefore be it

RESOLVED: That the Michigan State Medical Society request each of its component societies to appoint and activate a consumer committee composed of at least five members. Appropriate members of the Medical Society shall act as advisors to this committee, but not as members; both shall create a two-way communication pathway between the consumer and the profession; and be it further

RESOLVED: That the Michigan State Medical Society choose from the various consumer committees set up across the state the best possible representative talent as members of a state consumer committee. The state committee shall consist of at least twelve (12) members to act in a similar manner on a state level.

● RESOLUTION 29

Discrimination Against Physicians and Women in Membership on County Hospital Boards
David Allen Wild, MD, Manistee County

House Action: Adopted as Amended

Whereas, Public Act 350, 1913, as amended, governing the establishment and maintenance of county hospitals, is discriminatory in its Section 3 by prohibiting the appointment of practicing physicians to the boards of trustees of county hospitals, and

Whereas, it is further discriminatory by limiting the number of women who can serve on such boards, assuring that women will be in the minority on the board, which is a violation of State and Federal Constitutions, and

Whereas, the nature of these exclusions deprives county hospital boards of knowledgeable members of the community, deprives women of their constitutional guarantee of equal rights, and prevents physicians from contributing to most effective administration of the county hospitals, and

Whereas, by these discriminations the County Hospitals Act is unconstitutional, hostile to physicians and women, and detrimental to the best conduct of county hospitals; and

Whereas, Resolution 48 of the 1969 MSMS House of Delegates Annual Meeting instructed MSMS to seek amendments to P.A. 350 of 1913, repealing its unconstitutional and discriminatory restrictions against women and physicians, but such efforts so far have been unsuccessful; now therefore be it

RESOLVED: That MSMS explore the strategies of repeal of this section of PA 350 (1913).

● RESOLUTION 30

Increasing Hospital Construction Costs
Richard E. Straith, MD, Oakland County

House Action: Adopted as Amended

Whereas, hospital construction costs may approach $100,000 per bed, and appear to be increasing, and

Whereas, hospital construction costs are directly related to a multitude of rules, regulations and requirements of the Michigan Department of Public Health, and other factors, therefore be it

RESOLVED: That the Michigan State Medical Society propose to investigate, in conjunction with the Michigan Osteopathic Association, the Michigan Hospital Association, the Michigan Osteopathic Hospital Association, the Michigan Department of Public Health, and other interested parties, ways and means of retarding the rapid rise of hospital construction cost.

• RESOLUTION 31

Reporting Medical and Surgical Care to Insurance Companies
Keith M. Holmes, MD, Oakland County

House Action: Adopted as Amended

Whereas, the cost in time and money for reporting medical and surgical care to insurance companies is presently borne by the physician, and

Whereas, every effort should be made to hold down the cost of medical care, borne by the patient, therefore be it

RESOLVED: That the MSMS explore ways of setting up a method of direct dialing the information needed to both public and private insurance companies (as is now done when patients apply for insurance and medical history is needed), and furthermore,

RESOLVED: That this be done utilizing the AMA Current Procedural Terminology code.

• RESOLUTION 32

Laboratory Service for Comprehensive Drug Abuse Treatment Programs
Wayne County Medical Society

House Action: Adopted as Amended

Whereas, drug addiction is now a community health problem of epidemic proportions, and

Whereas, to combat this community health problem it is essential that hospitals and other non-profit and private health facilities develop and operate comprehensive drug abuse treatment programs, and

Whereas, hospitals and other non-profit health facilities do not have adequate funds for the development and operation of comprehensive drug abuse treatment programs, and

Whereas, laboratory service is one of the major expenses in the operation of comprehensive treatment programs, and

Whereas, federal, state, county, and city governments have allocated public funds for the prevention and control of drug addiction; therefore be it

RESOLVED: That the Michigan State Medical Society encourage the appropriate federal, state and local agencies to support the funding for comprehensive services to include laboratory services for the drug addicts enrolled in hospital and other approved community comprehensive drug abuse treatment programs.

• RESOLUTION 33

Application of the "Good Samaritan Law" to Physicians Forced to Service the Emergency Room by Hospital Bylaws
Herbert L. Nigg, MD, Tuscola County

House Action: Disapproved

Whereas, hospital emergency room not serviced by professional emergency room corporations frequently include emergency room service as a requirement for staff membership, and

Whereas, emergency room work increases liability and malpractice insurance rates, be it

RESOLVED: That physicians required by hospital bylaws to service emergency room duty be included under the "Good Samaritan Act."

• RESOLUTION 34

Abolition of Seven Year Limitation of Service Connection Classification of Veterans Disabled by Multiple Sclerosis
Herbert L. Nigg, MD, Tuscola County

House Action: Disapproved

Whereas, veterans disabled by multiple sclerosis must be diagnosed within seven years of service discharge to qualify for service connection disability, and

Whereas, the Veterans Administration will not recognize a retrospective diagnosis and an establishment of the date of onset many years prior to the present seven year limit, and

Whereas, multiple sclerosis is defined as having a very insidious onset and recent studies suggest an even longer prodrome than previously believed, so that no one knows the date of onset; therefore be it

RESOLVED: That the Michigan State Medical Society request Michigan Senators, Congressmen, the American Medical Association and the Veterans Administration to abolish any time limitation as a requirement for full disability payments to veterans disabled by multiple sclerosis.

• RESOLUTION 35

Revision of Present Geographical Determination of Michigan Variable Fees
Herbert L. Nigg, MD, Tuscola County

House Action: No Action

Whereas, a more equitable and improved distribution of physicians is necessary as indicated by numerous communities, the general public, Sears Roebuck, H.E.W., and the Michigan State Medical Society as noted in 1970, Resolutions 7, 13, 29, 50, 85, and 96, and

Whereas, Michigan Blue Shield and Michigan Blue Cross have based the Michigan Variable Fee plan on a geographical division No. 1, 2, 3, 4, and

Whereas, the Michigan Variable Fee plan is therefore a financial deterrent to the rural or outstate location of needed doctors; therefore be it

RESOLVED: That the Michigan Variable Fee plan be changed to a straight fee for service throughout the state based on the present highest level geographical division, and be it further

RESOLVED: That the equality of fees whether rural, outstate or metropolitan Michigan be made known to all medical schools' interns and residents in the U.S.A.

• RESOLUTION 36

Unsatisfactory Federal Narcotic Registration Form
Glenn E. Moore, MD, Genesee County

House Action: Adopted

Whereas, it is necessary for physicians to re-register annually with the Bureau of Narcotics and Dangerous Drugs, and

Whereas, this re-registration has been accomplished easily and with complete understanding in the past, and

Whereas, the new application is insulting in that its first paragraph details the number of years in prison and/or the thousands of dollars in fines that it will impose if physicians err in the filling out of the application, and

Whereas, the form and content of the new application are obtuse, ambiguous, unnecessarily complicated and too devious to be completed sensibly and accurately by the average busy physician, and

Whereas, it puts the physician in the uncomfortable position of having to rely on the explanations of a third party to hope to comply truthfully with the provisions of the application, and

Whereas, the Bureau of Narcotics and Dangerous Drugs has found it utterly impossible to process its own form; therefore be it

RESOLVED: That the Michigan State Medical Society delegates to the American Medical Association be directed to urge the American Medical Association to use every means at its disposal to correct this bureaucratic monstrosity and to insist that a re-application form be designed that is easily filled out and uniformly comprehensible to the honorable physicians of this great nation.

● RESOLUTION 37

Physician Participation with Third Parties
John W. Moses, MD, Wayne County

House Action: Adopted and referred to The Council for implementation

Whereas, with "participation," as interpreted by third parties and as authorized by the State Insurance Commissioner, the physician receives fees as determined by third parties, and there is no mechanism for the physician to assert his wishes except by declining to participate, and

Whereas, with participation the physician actually subsidizes the medical care costs of the community without any reward or recognition, and

Whereas, third parties have "bargained" and "negotiated" contracts for medical care with corporations, unions and groups of individuals and the participating physician has never been represented at these sessions nor his wishes ever been expressed, no consideration has ever been given to his changing costs, and

Whereas, participation of physicians is needed on a group basis for negotiations but such participation should be made by physicians to their professional society and not a third party; therefore be it

RESOLVED: That the Michigan State Medical Society develop a negotiating mechanism to represent the physicians' views.

● RESOLUTION 38

Definition of a Specialist
James Dooley, MD, Section on General Practice

House Action: Adopted as Amended

Whereas, the 1966 MSMS House of Delegates passed a resolution (No. 22) defining a specialist, and

Whereas, Resolution No. 22 does not include physicians eligible for certification by the American Board of Family Practice (ABFP); therefore be it

RESOLVED: That the MSMS House of Delegates adopt the following definition of a specialist:

A specialist shall be a physician

1. certified by the appropriate specialty board, approved by the American Board for Medical Specialties and by the American Medical Association Council on Medical Education, or
2. practicing as a specialist not possessing a specialty board certificate, but has completed an approved residency in that specialty, or
3. is recognized as a specialist by the staff of the hospital in which he practices provided it is an accredited hospital, and is a physician who is eligible for certification by his specialty board.

● RESOLUTION 39

Higher Reimbursement by Blue Shield for Outpatient Surgery Performed in the Physician's Office
James Dooley, MD, Section on General Practice

House Action: Adopted as Amended

Whereas, there is no direct expense to the physician who performs an outpatient surgical procedure in a hospital emergency room, and

Whereas, there is direct expense to the physician performing the same procedure in his office, and

Whereas, there is no direct charge by a hospital to third party insurers when the physician performs such procedures in his office, and

Whereas, there is a direct charge by the hospital to third party insurers when such procedures are performed in hospital emergency rooms; therefore be it

RESOLVED: That the MSMS House of Delegates, in the interest of equity, strongly supports the concept that third-party payors agree to pay an additional *facility* fee for surgical procedures performed in a surgeon's office.

● RESOLUTION 40

Recommendations for Peer Review
Richard C. Deming, MD, Jackson County

House Action: Adopted as Amended

Whereas, Peer review has been a long established system in all modern private approved hospitals as demonstrated by tissue committees, credential committees, grievance committees, surgical committees, etc., and

Whereas, a peer review can by its very title only be a review by one's peers, in this case, fellow physicians, and

Whereas, third parties need not and indeed should not have a part in any deliberations from such a body; therefore be it

RESOLVED: That the review committee should be composed entirely of local physicians appointed by their respective hospital medical staff or county society, be it further

RESOLVED: To respect the confidentiality of medical records and physician-patient relationship, and be it further

RESOLVED: That in the event that a satisfactory solution to a review is not reached at the hospital staff level that it may be appealed to the county or regional review committee, or then when and if established to the State Peer Review Committee, and be it further

RESOLVED: That members of these review boards should be only physicians appointed or elected by physicians from their respective areas of representation such as county, regional or state.

● RESOLUTION 41

Blue Cross - Blue Shield Coverage for Medical Students
Benjamin Jeffries, MD, Wayne County

House Action: Adopted and referred to The Council for Study and Feasibility

Whereas, the medical student is entering the medical profession, and

Whereas, the American Medical Association and the Michigan State Medical Society have made it policy to involve medical students in the activities of the AMA and MSMS, and

Whereas, it is advisable to implement in meaningful ways these policies of the American Medical Association and the Michigan State Medical Society; therefore be it

RESOLVED: That the Michigan State Medical Society study arrangements for the extension of the group medical program (Blue Cross-Blue Shield) to the medical students of the Medical Schools of the state. (Michigan State University School of Medicine, University of Michigan School of Medicine, Wayne State University School of Medicine.)

● RESOLUTION 42

Direct Payment to Medicaid Patients
T. E. Andrews, MD, Kalamazoo County

House Action: Adopted as Amended

Whereas, Federal law permits direct payment of Medicaid funds to patients, at the option of the State, and

Whereas, two years ago, MSMS House of Delegates passed a resolution recommending that the State of Michigan allow this, if the physician and patient agree, and

Whereas, the Michigan Dept. of Social Service has arbitrarily ruled that such procedure will not be implemented; therefore be it

RESOLVED: That The Council of MSMS seek Michigan State Legislative and Executive Office support for the option of either direct billing or assignment under Group II Medicaid Assistance.

● RESOLUTION 43

Direct Payment of National Health Insurance Funds to Patients
T. E. Andrews, MD, Kalamazoo County

House Action: Adopted as Amended

Whereas, in order to encourage a close patient-physician relationship, and

Whereas, to preserve the patient and physician's right to enter into a payment agreement for professional services; therefore be it

RESOLVED: That The Council of MSMS recommend that any future federal health program permit direct billing of patients by physicians and allow federal payment of funds to patients when patient and physician agree.

● RESOLUTION 44

National Health Insurance Legislation
William Haeck, MD, Kent County

House Action: No Action

Whereas, National Health Insurance is a subject currently being discussed in the Congress of the United States, and

Whereas, the American Medical Association has proposed a national compulsory health insurance program called Medicredit, and

Whereas, this program plays into the hands of those who wish to legislate National Health Insurance, and

Whereas, the U. S. Chamber of Commerce has adopted a Policy Declaration on Maintenance of Health and Medical Care which is more in line with the thinking of the private practitioner of medicine; therefore be it

RESOLVED: That the MSMS House of Delegates endorse the Policy Declaration of the U. S. Chamber of Commerce, and be it further

RESOLVED: That the MSMS Delegates to the AMA at its December meeting urge the AMA House of Delegates to endorse the U. S. Chamber of Commerce Policy Declaration in place of the AMA Medicredit Policy.

● RESOLUTION 45

Elimination of Delegate to Councillor
C. W. Colwell, MD, Genesee County

House Action: Disapproved

Whereas, the House of Delegates is the body of original jurisdiction in the Michigan State Medical Society and may give direction to and impose obligations upon The Council of the Michigan State Medical Society, and

Whereas, The Council acts in the interim between meetings of the House and

Whereas, the House sits in judgment on the actions of The Council and

Whereas, the House of Delegates believes that its members should avoid any possible conflict of interest or responsibility; therefore be it

RESOLVED: That an elected delegate or alternate delegate to the House of Delegates of the Michigan State Medical Society, whether formally seated or not, if elected to The Council of MSMS shall forthwith resign his position as a delegate or alternate delegate to the House of Delegates.

● RESOLUTION 46

Insurance Coverage for Voluntary Sterilization
Jack R. Postle, MD, Northern Michigan Medical Society

House Action: Adopted Resolution 65 as Amended as a Substitute Resolution for Resolution 46. See Resolution 65.

● RESOLUTION 47

Exoneration of a Physician from Conspiracy in the Assassination of a President
Robert J. Toteff, MD, Saginaw County

House Action: Adopted as Amended

Whereas, it is a recognized fact that the practice of medicine adheres to the tenet that the care of the sick or injured is rendered irrespective of the manner in which that person became ill or sustained his injury, and

Whereas, Samuel A. Mudd, MD, a graduate of the University of Maryland School of Medicine, in 1865, was tried and found guilty by a special Military Commission of "Conspiracy to assassinate President Abraham Lincoln" because of the medical assistance given to John Wilkes Booth, following such assassination, and

Whereas, it is the conviction of the members of this body that a physician has a legal and moral right to minister to all persons needing care regardless of their beliefs or crimes that may have been committed, and

Whereas, years of research conducted by Richard D. Mudd, MD, retired Colonel, Air Force Reserves, grandson of the convicted physician and a member of the Saginaw County Medical Society and MSMS for many years, indicates beyond question that Dr. Samuel A. Mudd was not guilty of conspiracy and this research is available for study if this body so desires, and

Whereas, because of his work in a Yellow Fever epidemic in the prison where he was incarcerated, Dr. Samuel A. Mudd, MD, was pardoned by the same President who ordered the Military Commission that convicted him; therefore be it

RESOLVED: That the MSMS House of Delegates go on record in favor of urging our United States Senators to continue in this pursuit to obtain complete exoneration of Dr. Samuel A. Mudd by the President of the United States and the Congress of the United States.

● RESOLUTION 48

Home Health Services Under Medicare
Louis Zako, MD, Wayne County

House Action: Adopted with the Request that The Council refer this matter to the Legislative Committee for possible implementation

Whereas, the 1970 House of Delegates of the Michigan State Medical Society approved Resolution 101 urging the State and component medical societies, doctors, and their patients to protest to members of Congress and the Department of Health, Education & Welfare the "unrealistic interpretation of Home Health Care and immediately return to traditional VNA service," and

Whereas, the Social Security Administration has continued through numerous directives to erode the effectiveness and availability of this care, thus depriving many senior citizens of these important services and causing unnecessary hospitalization and institutionalization in many cases; therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society go on record as reaffirming its support of the principles and necessity of a fully-implemented home health care program under Medicare, available to all eligible patients, and be it further

RESOLVED: That Certificate of Need for the delivery of Home Health Care Services to patients be the prerogative of the practicing physician, thus helping him to participate fully in reducing the total cost of care of the individual patient, and be it further

RESOLVED: That copies of this resolution be sent to all parties in Washington and Lansing who are concerned with this matter and who might influence its future course.

● RESOLUTION 49

Membership Priorities
Arthur Ulmer, MD, Wayne County

House Action: Adopted as Amended

Whereas, the primary responsibility of the Michigan State Medical Society is to serve its members, and

Whereas, The Council of the Michigan State Medical Society acts for the Society as a whole and for the House of Delegates between sessions, and

Whereas, the number and complexity of the medical issues and problems confronting The Council are many; therefore be it

RESOLVED: That the Chairman of The Council instruct staff of MSMS to prepare a list of current medical issues and problems and to poll the members of the Michigan State Medical Society periodically to determine which of these issues are of primary concern to them.

● RESOLUTION 50

$25.00 Re-Registration Fee
W. J. Liedel, MD, Monroe County

House Action: Disapproved

Whereas, the State of Michigan has increased the annual medical re-registration fee to $25.00, and

Whereas, the amount of money which will be generated by this increase is in excess of the amount of money necessary to finance the policing, testing, and licensing of medical practices in the State of Michigan, and

Whereas, these excess monies are to be transferred to the general fund, and

Whereas, these fees are therefore a form of discriminatory taxation, and

Whereas, the constitutionality of this form of taxation is questionable; be it therefore

RESOLVED: That this House of Delegates direct the Michigan State Medical Society legal counsel to file suit in the proper court to test the legality of this discriminatory form of taxation.

● RESOLUTION 51

Nomination of Members of the Corporate Body of Blue Shield
A. J. Neerken, MD, Kalamazoo County

House Action: Disapproved

Whereas, a special meeting of the House of Delegates of Michigan State Medical Society voted to discontinue nomination of physician members of the corporate body of Michigan Medical Service, and

Whereas, Michigan Medical Service plays a major role in the economics of medicine in the State of Michigan,

Whereas, it is in the best interests of the people of the State of Michigan, Michigan Medical Service, and the doctors of the State of Michigan that there be representatives of organized medicine on the corporate body and board of directors of Michigan Medical Service; therefore be it

RESOLVED: That the House of Delegates of Michigan State Medical Society nominate and elect members of the corporate body of Michigan Medical Service as designated in the Articles of Incorporation of the organization, and be it further

RESOLVED: That the Speaker of the House of Delegates of Michigan State Medical Society arrange for an election to name these members at least one month prior to the next annual meeting of the Corporate Body of Michigan Medical Service.

● RESOLUTION 52

Physician Relations With Communications Media
Brock Brush, MD, Wayne County

House Action: Adopted as Amended

Whereas, the Communication Media — television, radio and newspaper have proven to have the greatest influence on public opinion; therefore be it

RESOLVED: That recent liberalization of the code of ethics be publicized to the members of the profession, and be it further

RESOLVED: That the Michigan State Medical Society encourage all physicians in the State to contact the local outlets of the various communications media and make arrangements to utilize these media for the advancement of information on the present system of delivery of medical services, and be it further

RESOLVED: That these matters should be accomplished with consent of the local medical society and in accord with the local guidelines on the use of the media.

● RESOLUTION 53

Recognition of Physician's Services to MSMS
Richard R. Galpin, MD, Oakland County

House Action: Adopted as Amended

Whereas, many member physicians of the MSMS have given and will continue to give unselfishly of their time and talents by serving in The Council, House of Delegates, and other significant positions of the MSMS, and

Whereas, these services are of significant and direct service to their fellow physicians and the people of the State of Michigan; therefore be it

RESOLVED: That the Speaker of the House of Delegates be requested and empowered to develop a suitable means of recognition for these physicians and their services, and be it further

RESOLVED: That where appropriate, this recognition may be made retroactive.

● RESOLUTION 54

Emigration of Medical Graduates
George D. Stilwill, MD, Ingham County

House Action: Adopted

Whereas, large percentages of graduates of the University of Michigan, Wayne State University, and Michigan State University leave the state for purposes of internship, residency training, and for the practice of medicine, and

Whereas, the people of the State of Michigan have had a commitment of resources in their undergraduate training, and

Whereas, the members of the MSMS are concerned that the citizens of Michigan continue to receive the best medical care possible; be it

RESOLVED: That the House of Delegates authorize the Speaker to appoint an ad hoc committee composed of academic and practicing physicians, and medical students to investigate the causes of this loss to the people of the State of Michigan, and be it further

RESOLVED: That the committee submit a series of specific recommendations to help minimize this loss. This report should be presented to The Council and 1972 House of Delegates.

● RESOLUTION 55

Change of DSR Reporting Forms for Blue Shield
K. L. Urwiller, MD, Oakland County

House Action: Adopted in concept and referred to The Council for further study and efforts at implementation.

Whereas, the Michigan Blue Shield has now furnished claim forms for the subscriber who has contracted for service from a non-participating physician which contain a statement for the subscriber to sign in which he agrees to pay the difference, if any, between the physician's fee and the Blue Shield payment, and

Whereas, the patient does not know the amount of the Blue Shield payment, thus, in effect, asking the subscriber to obligate himself to pay an unknown sum of money, and

Whereas, the physician signs the MMS billing form (DSR) when he does not participate without knowing what MMS will pay, and

Whereas, only by so doing, can the patient receive payment for the covered service; therefore be it

RESOLVED: By the members of the Michigan State Medical Society that Michigan Blue Shield be informed that henceforth the physician will supply only the name, policy number, service rendered, the date and place the service was rendered, and the fee charged for any subscriber.

● RESOLUTION 56

Surveillance and Utilization Review
Earl Rinkenberger, MD, Macomb County

House Action: Adopted as Amended

Whereas, the AMA and MSMS have repeatedly asserted that peer review can only be accomplished by physicians, and

Whereas, the Department of Social Services, through its Medicaid performance surveillance utilization report system, would utilize the peer review structure of the Michigan State Medical Society to review unusual patterns of care, and

Whereas, screening out normal performance and utilization expectation would reduce the peer review work load to only "exception reporting" that would be delineated by physicians, and

Whereas, the Department of Social Services has invited the MSMS, the Osteopathic Association and the two hospital associations to assist in developing length of stay parameters of care so that unnecessary peer review could be held to a minimum, and

Whereas, MSMS is rapidly developing improved structures and mechanisms for peer review services for the utilization by governmental agencies and private agencies; therefore be it

RESOLVED: That MSMS continue to cooperate with the Medicaid Performance, Surveillance and Utilization Report system through the practicing physician participation in its Advisory committee, and be it further

RESOLVED: That these members be appointed by The Council, continue to serve at the Council's pleasure, and continue to report back to The Council.

● RESOLUTION 57

Smoking During Meetings of the Michigan State House of Delegates
Earl A. Rinkenberger, MD, Macomb County

House Action: Disapproved

Whereas, a minority of the House of Delegates has now become a majority, and

Whereas, this majority by passing 1970 Resolution 87 now desires to descriminate against a minority group; therefore be it

RESOLVED: A section be set aside for those who wish to smoke.

● RESOLUTION 58

Appointment of Physician Members to the Corporate Body of Blue Shield
Jack Hoogerhyde, MD, Kent County

House Action: Disapproved

Whereas, the Corporate Body of Blue Shield may contain thirty six (36) physician members, and

Whereas, under the present rules these thirty six (36) members of the Corporate Body may select the twelve (12) physician members to serve on the Board of Directors of Blue Shield, and

Whereas, the appointments so made by the Blue Shield Corporate Body may not allow for a wider and more equitable geographical distribution than would serve the best interests of the membership as a whole of the MSMS, and

Whereas, The Speaker of the House of Delegates, who is perhaps better acquainted with prospective physician members who could represent the entire membership of MSMS; therefore be it

RESOLVED: That the Speaker of the House of Delegates be given the necessary authority by this House of Delegates to make the appointments of physician members of the Corporate Body of Blue Shield.

● RESOLUTION 59

Drug Abuse Control
R. A. Rasmussen, MD, Grand Rapids, Kent

House Action: Adopted as Amended

Whereas, Drug Abuse has been proclaimed by our Governor and the President to be a major problem and to require a maximum effort at control, and

Whereas, as the physician is the only licensed user of drugs because of his knowledge about them and training in their use in the management of disease processes, and

Whereas, the medical use of drugs by physicians is generally a fairly tightly controlled area and does not constitute a real problem, and

Whereas, drugs available to the public through whatever source for non-medical use constitute the area in need of control, and

Whereas, our government and the people quite properly look to the physician for guidance in the development of the proper and required governmental legislative control measures and assistance in educational programs; therefore be it

RESOLVED: That the MSMS urge every physician to become involved locally, on state and national levels in the development of the solution to the problem, and that MSMS work with our Governor's Drug Committee, and other Legislative Agencies in the development of legislation designed toward needed drug control and education of the public.

● RESOLUTION 60

Medicaid Provision for Preventive Health Care Services
Daniel J. Wilhelm, MD, St. Clair

House Action: Adopted as Amended

Whereas, the present Medicaid structure provides for treatment and care of disease only, and makes no allowance for preventive medical services, and

Whereas, preventive medical services are recognized as a most important aspect of total health care, and

Whereas, Preventive medical services would have an effect of economy on health care costs; therefore be it

RESOLVED: That The Council of the Michigan State Medical Society take appropriate steps to urge the legislature and the Department of Social Services to include in the Medicaid program preventive health care services such as physical examination, pre-school examination, well-baby visits, necessary immunizations and sterilization.

● RESOLUTION 61

Delay by Michigan Blue Shield in Payment of Physician's Services Rendered
Orville W. Oughtred, MD, Macomb

House Action: Adopted

Whereas, services rendered by hospitals are paid by Michigan Blue Cross, in approximately two weeks, after the accounts have been received; therefore be it

RESOLVED: That MSMS request on behalf of its members, that accounts for services rendered by physicians and surgeons, be paid in a reasonable length of time by Michigan Blue Shield, similar to the present payment by Michigan Blue Cross, of the accounts rendered by hospitals.

● RESOLUTION 62

Support of Proposed Policy Declaration on Maintenance of Health and Medical Care of National Chamber of Commerce of the United States
Sidney Chapin, MD, Wayne County

House Action: Adopted as Amended

Whereas, the National Chamber of Commerce of the United States has adopted a proposed Policy Declaration on reform of the national health care system, and

Whereas, the American business community and professional associations have indicated their support by referendum of this proposed Policy Declaration of the National Chamber of Commerce, and

Whereas, this proposed Policy Declaration is a positive approach for the improvement of medical care in this country; therefore be it

RESOLVED: That the Michigan State Medical Society House of Delegates in general appreciates the philosophy of the proposed policy declaration of the Chamber of Commerce of the United States, and be it further

RESOLVED: That The Council of the Michigan State Medical Society be instructed to follow the development of this proposed Policy Declaration with the intent of supporting appropriate action.

● RESOLUTION 63

MECO (Medical Education Community Orientation) Project
Stephen F. Lowry (University of Michigan Medical Student)

House Action: Adopted

Whereas, two years of successful operation of the MECO Project have proved the feasibility of such a program on a statewide basis, and

Whereas, the MECO Project has been enthusiastically received by nearly all medical students participating, and

Whereas, most doctors involved in the project have expressed satisfaction with the efforts of their students, and

Whereas, this program presents an excellent opportunity for students to view, at an early state in their professional training, the delivery of medicine in the community, and

Whereas, this project could play an integral part in community and statewide efforts to recruit young physicians; therefore be it

RESOLVED: That the MSMS strengthen its support of the MECO Project by encouraging wider participation of community hospitals and physicians, seeking out broader financial resources for the program, and by expanding professional and public awareness of the Project through the media, County Medical Societies, and concerned community groups.

● RESOLUTION 64

Shortage of Physicians
Edwin S. Woodworth, MD, Livingston County

House Action: Adopted as Amended

Whereas, the shortage of practicing physicians in Michigan is growing, a fact of which the public is well aware, and

Whereas, the number of physicians graduated annually is a function of the medical schools through control of class size, and of the legislature through control of funding, and not of organized medicine, and

Whereas, recently in the press organized medicine has been unfairly accused of limiting the number of practicing physicians; therefore be it

RESOLVED: That The Council of MSMS be instructed to initiate a campaign to inform the public of its goals of obtaining adequate numbers of well-trained physicians for Michigan, and be it further

RESOLVED: That the MSMS reinforce its support of the Michigan Health Council Physician Placement Program, and be it further

RESOLVED: That The Council of MSMS be instructed to urge the Michigan Legislature to support a further increase in class size in the medical schools of this State, and be it further

RESOLVED: That The Council continue its dialogue with the medical schools and the medical students with the objectives of increasing the retention of graduates in Michigan and expanding the development of family practice.

● RESOLUTION 65

Payment for Voluntary Sterilization
Jack M. Stack, MD, Gratiot-Isabella-Clare Counties

House Action: Adopted as amended as a substitute for Resolution 46

Whereas, in 1970 the MSMS House of Delegates approved a resolution requesting Blue Shield and all other third party payment mechanisms to include voluntary elective sterilization as a benefit whether as an in-patient or out-patient basis, and

Whereas, in May Blue Shield announced their new policy that for selected policy holders out-patient vasectomy would be a benefit if medically indicated but contraindication to pregnancy in the wife was not to be considered a medical indication; therefore be it

RESOLVED: That MSMS reaffirm its policy of third party payment for elective sterilization — in-patient or out-patient; and be it further

RESOLVED: That a copy of this resolution be sent to each

Blue Shield Board Member and to the Michigan Insurance Commissioner.

● RESOLUTION 66

Abortion Reform Petition Drive
Jack M. Stack, MD, Gratiot-Isabella-Clare Counties

House Action: Adopted as Amended

Whereas, since 1967 MSMS has endorsed the concept that the law should be changed so that an abortion performed by a licensed physician in a licensed hospital should not be considered a criminal abortion, and

Whereas, MSMS has worked unsuccessfully within the legislative process to bring about this change in the law, and

Whereas, a petition drive to initiate legislation is presently underway, and

Whereas, the petitions initiated legislation which reads, "All other laws to the contrary notwithstanding, a licensed medical or osteopathic physician may perform an abortion at the request of a patient if the period of gestation has not exceeded 20 weeks. The procedure shall be performed in a licensed hospital or other facility approved by the Department of Public Health," is consistent with the public health interest and MSMS policy as affirmed by the Legal Affairs Committee and The Council of MSMS; therefore be it hereby

RESOLVED: That MSMS House of Delegates endorse the petition drive to initiate legislation for medical control of abortion.

● RESOLUTION 67

Support of Abortion Reform Referendum in 1972
Jack M. Stack, MD, Gratiot-Isabella-Clare Counties

House Action: Disapproved

Whereas, MSMS has gone on record since 1967 that the abortion law should be changed so that an abortion performed by a licensed physician in a licensed hospital should not be considered a criminal abortion, and

Whereas, medical abortion is now legal for Michigan women who can travel to New York State for this medical care, and

Whereas, upon completion of a successful petition drive to initiate legislation on abortion the bill will go to the people in a public referendum in the November 1972 general election, and

Whereas, it is in part the responsibility of the medical profession to help in the campaign to inform the public on the medical necessity of passage of the bill to give medical control of abortion in Michigan; therefore be it hereby

RESOLVED: That MSMS have a special one-year assessment of $25.00 per member in the 1972 dues billing to help finance the public education campaign to inform the public on the medical and public health necessity of passage of the abortion referendum.

● RESOLUTION 68

Financial Aid to Medical Students
Stephen Lowry (University of Michigan),
for Medical Student Caucus

House Action: Disapproved

Whereas, the increasing costs of medical education are forcing average medical students into debt, creating a sense of financial urgency upon graduation, and

Whereas, this sense of urgency often deters the young physician from working in less financially rewarding areas such as ghettos, and

Whereas, it is generally acknowledged by the public and the medical profession that poor geographic distribution of physicians is a major problem in health care delivery; therefore be it

RESOLVED: That a committee consisting of physicians and medical students be created to determine methods of decreasing the financial debts presently incurred by students during their medical education.

SPECIAL MEMBERSHIPS

THE REFERENCE COMMITTEE on Special Memberships, Donald D. Finlayson, MD, Chairman, recommended approval of the following special memberships as recommended by the component medical societies and certified by the Secretary of MSMS in accordance with the Bylaws:

Retired Memberships

Calhoun — Allen W. Byrnes, MD; Donald B. Morrison, MD.
Houghton — Percy J. Murphy, MD.
Ingham — Albert E. Huestis, MD; Wayne O. Martin, MD; Frank D. Richards, MD.
Ionia-Montcalm — Jekabs Naglins, MD.
Jackson — William R. Latchaw, MD; John W. Wholihan, MD.
Kalamazoo — Russell A. Hayner, MD; Martin D. Verhage, MD.
Kent — Charles H. Frantz, MD.
Manistee — Ernest B. Miller, MD.
Newaygo — J. Paul Klein, MD.
Northern Michigan — Kathryn D. Weburg, MD.
Oakland — Donald B. Jury, MD.
Ottawa — Frederick F. Yonkman, MD.
Saginaw — Milton G. Butler, MD.
St. Clair — Donald A. Koch, MD; Walter S. Novak, MD.
Wayne — Earle A. Irvin, MD; David Leach, MD; James E. Lofstrom, MD; David H. Lynn, MD; Edgar V. Mendians, MD; Harry Portnoy, MD; Harold B. Rice, MD; Edward M. Retarius, MD; Paul T. Salchow, MD; Raymond A. Sokolov, MD.

Life Memberships

Calhoun — L. D. Funk, MD; T. K. Jones, MD; C.A.E. Lund, MD; Richard A. Stiefel, MD; Charles S. Walker, MD.
Genesee — Franklin W. Baske, MD; Leslie V. Burkett, MD; William D. Chase, MD; Joseph A. Macksood, MD; Leighton O. Shantz, MD.
Gratiot — S. C. McArthur, MD.
Houghton — Anton J. Janis, MD.
Ingham — Ruben Alexander, MD; Mathias S. Hurth, MD.
Ionia-Montcalm — Lloyd S. Duncan, MD; Edmund S. Socha, MD.
Kent — Guy W. DeBoer, MD; Edward J. Grass, MD; C. Peter Truog, MD.
Marquette — Eugene R. Elzinga, MD; Moses Cooperstock, MD.
Mecosta-Osceola-Lake — Paul B. Kilmer, MD.
Oakland — John B. Hassberger, MD; Francis J. McEvoy, MD; Eugene L. Spoehr, MD; Earle W. Spohn, MD; John J. Zinterhofer, MD.
St. Clair — Erwin W. Blatter, MD; Charles L. Borden, MD.
Tuscola — Elmer H. Merrill, MD.
Washtenaw — Paul H. Bassow, MD; Rigdon K. Ratliff, MD; Maurice H. Seevers, MD; R. Wallace Teed, MD; R. Walter Waggoner, MD.
Wayne — Robin C. Buerki, MD; Leland F. Carter, MD; William G. Coleman, MD; John J. Connors, MD; Basil R. Dickson, MD; Melvin E. Fowler, MD; Nils A. Franzen, MD; Albert C. Hamburger, MD; Edwin L. Harmon, MD; Jesse T. Harper, MD; Leo Kallman, MD; Herman Kanter, MD; Henry J. Kehoe, MD; Melvin O. Kernick, MD; Dennis D. Kovan, MD; James V. Lammy, MD; Eugene Laurisin, MD; C.B.P. Loranger, MD; Francis B. MacMillan, MD; George W. Morrison, MD; Nathan H. Moss, MD; Frank Scott Perkins, MD; Harold J. Rezanka, MD; Ralph C. Rueger, MD; Herman D. Scarney, MD; Robert J. Schneck, MD; Curt P. Schneider, MD; Joseph H. Shaf-

fer, MD; Charles H. Sharrer, MD; Richard F. Sterba, MD; Thaddeus Stokfisz, MD; Carl W. Swanson, MD; Gabriel A. Tatelis, MD; Thomas V. Wharton, MD; Walter K. Whitehead, MD; Leslie F. Wilcox, MD; Steven L. VanRiper, MD; Morton I. Yarrows, MD.

THE HOUSE adopted the report of the Reference Committee.

PRESENTATIONS AND AWARDS

FIFTY YEAR AWARDS

President Harold H. Hiscock, MD, presented the Fifty Year Awards to:

Volney N. Butler, MD, *Detroit*
Laslo Galdonyi, MD, *Detroit*
Perry C. Gittins, MD, *Birmingham*
Bowers, H. Growt, MD, *Addison*
Leland E. Holly, Sr., MD, *Muskegon*
Malcolm D. MacQueen, MD, *Detroit*
Eugene Osius, MD, *Detroit*
Benedetto Pugliesi, MD, *East Detroit*
Harold A. St. John, MD, *Pontiac*
Harotune Yesayian, MD, *Detroit*

NATIONAL PRESIDENTS AWARDS

Awards were presented to the following for their service as presidents of national medical organizations:

Stefan S. Fajans, MD, Ann Arbor, President, American Diabetes Association

Alex Sidney Friedlaender, MD, Southfield, President, American Association of Clinical Immunology and Allergy

John G. Wiegenstein, MD, Lansing, President, American College of Emergency Physicians

MSMS SPECIAL AWARDS

Speaker Vernon V. Bass, MD, presented a Past Speaker's Key to former Speaker James B. Blodgett, MD

EMPLOYEE AWARD

Council Chairman Ross V. Taylor, MD, presented the following employee award as previously authorized by the House of Delegates:

Herbert Mehler — 5 years of service

MSMS FLAG AWARDS

Awards were presented to the following doctors who have served as presidents of state-wide non-medical organizations:

Harold E. DePree, MD, Kalamazoo, President, Michigan Heart Association

Julien Priver, MD, Detroit, President, Michigan Hospital Association

ELECTIONS

The House of Delegates elected the following MSMS Officers, Councilors, and American Medical Association Delegates and Alternate Delegates:

Officers

President-Elect — John J. Coury, MD, Port Huron
Treasurer — John R. Ylvisaker, MD, Pontiac
Assistant Treasurer — Ernest P. Griffin, Jr., MD, Flint
Secretary — Kenneth H. Johnson, MD, Lansing
Assistant Secretary — Ross V. Taylor, MD, Jackson
Speaker of the House —Vernon V. Bass, MD, Saginaw
Vice Speaker of the House — James D. Fryfogle, MD, Southfield

Councilors

1st District: Louis R. Zako, MD, Allen Park
7th District: James H. Tisdel, MD, Port Huron
8th District: William A. DeYoung, MD, Saginaw
10th District: Robert C. Prophater, MD, Bay City
12th District: Raymond Hockstad, MD, Escanaba
15th District: Sydney Scher, MD, Mt. Clemens

Delegates to the American Medical Association

(January 1, 1972 to December 31, 1973)
Robert E. Rice, MD, Greenville
Otto K. Engelke, MD, Ann Arbor
John W. Moses, MD, Detroit
Paul T. Lahti, MD, Royal Oak

Alternate Delegates to the American Medical Association

(January 1, 1972 to December 31, 1973)
(in order of seniority)
Frank B. Walker, II, MD, Grosse Pointe
Donald T. Anderson, MD, Kingsford
Richard McMurray, MD, Flint
Brooker L. Masters, MD, Fremont

REFERENCE COMMITTEES

CONSTITUTION & BYLAWS

Stuart M. Gould, Jr., MD, Washtenaw, *Chairman*
Donald Bryan, MD, Wayne
Z. F. Endress, MD, Oakland
Frederick H. Lindenfeld, MD, Berrien
W. Patrick Mazier, MD, Proctology Section
David J. Millard, MD, Van Buren
Frank B. Walker, II, MD, Wayne
Councilor Advisors:
John J. Coury, MD, Port Huron
Frank Bicknell, MD, Detroit

CREDENTIALS & TELLERS

Charles W. Oakes, Jr., MD, Huron, *Chairman*
J. M. Crost, MD, Clinton
John W. MacKenzie, Jr., MD, Genesee
Victor A. Notier, MD, Kent
Arthur Z. Ostrowski, MD, Wayne
Earl A. Rinkenberger, MD, Macomb
Wm. J. Yott, MD, Wayne

HEALTH INSURANCE & MEDICAL SERVICES

James Blodgett, MD, Wayne, *Chairman*
Robert D. Allaben, MD, Wayne
Richard J. Bower, MD, Kalamazoo
Frederick S. Gillett, MD, Kent
F. Alan Kennedy, MD, Berrien
Richard McMurray, MD, Genesee
Beverly C. Payne, MD, Washtenaw
Thomas J. Setter, MD, Macomb
Homer M. Smathers, MD, Wayne
H. Clay Tellman, MD, Muskegon
Leo W. Walker, MD, Pathology Section

Councilor Advisors:
Ralph R. Cooper, MD, Detroit
Noyes L. Avery, Jr., MD, Grand Rapids
Donald T. Anderson, MD, Kingsford

MISCELLANEOUS BUSINESS

Charles E. Conaway, MD, Lapeer, *Chairman*
Roy J. Gerard, MD, Saginaw
David Kahn, MD, Ingham
Gerald H. Mandell, MD, Wayne
Adrian J. Neerken, MD, Kalamazoo
Herbert L. Nigg, MD, Tuscola
Kenneth L. Urwiller, MD, Oakland

Councilor Advisors:
Wm. A. LeMire, Sr., MD, Escanaba
A. Carl Stander, MD, Saginaw
Edward J. Tallant, MD, Detroit

PUBLIC & PROFESSIONAL RELATIONS

Robert E. Rice, MD, Ionia, *Chairman*
Raymond J. Barrett, MD, Wayne
S. E. Chapin, MD, Wayne
Henry T. Forsyth, MD, Shiawassee
Richard R. Galpin, MD, Oakland
D. Bonta Hiscoe, MD, Ingham
L. E. Holly, II, MD, Muskegon
K. M. Holmes, MD, Oakland
Richard Rasmussen, MD, Kent
Henry A. Scovill, MD, Washtenaw
K. Van Goor, MD, Kent

Councilor Advisors:
Adam C. McClay, MD, Traverse City
Brock E. Brush, MD, Detroit
Robert J. Mason, MD, Birmingham

REPORTS OF COUNCIL & OFFICERS

Herbert W. Harris, MD, Ingham, *Chairman*
B. Phillip Brown, MD, Eaton
Ned I. Chalat, MD, Wayne
F. C. O'Dell, Jr., MD, Alpena
Neal A. Vanselow, MD, Washtenaw
J. A. Witter, MD, Wayne

Councilor Advisors:
Ross V. Taylor, MD, Jackson
B. L. Masters, MD, Fremont

RESOLUTIONS

V. A. Marks, MD, Midland, *Chairman*
Conrad R. Lam, MD, Wayne
Kenneth J. Ray, MD, Wayne
Robert M. Stow, MD, Ingham
Harry Towsley, MD, Washtenaw
Edwin S. Woodworth, MD, Livingston
Michael Zelenock, MD, Surgery Section
Councilor Advisors:
Milton R. Weed, MD, Grosse Pointe Park
W. Kaye Locklin, MD, Kalamazoo
Sydney Scher, MD, Mt. Clemens

RULES & ORDER OF BUSINESS

John H. McLaughlin, MD, Oakland, *Chairman*
James I. Clark, MD, Allegan
Charles J. France, MD, Wayne
Jack R. Crommons, MD, Physical Med. Section
Frank W. Power, MD, Grand Traverse
Winston B. Prothro, MD, Public Health Section
Russell C. Rowan, MD, Calhoun

SPECIAL MEMBERSHIPS

D. D. Finlayson, MD, Chippewa, *Chairman*
Alexander Blain, III, MD, Wayne
Paul C. Goodreau, MD, Houghton
John W. Henderson, MD, Washtenaw
K. T. McCunegle, MD, Sanilac
Robert J. Toteff, MD, Saginaw

STATE & FEDERAL LEGISLATION

Louis E. Heideman, MD, Wayne, *Chairman*
Richard Deming, MD, Jackson
John W. Grigg, MD, Otolaryngology Section
Wm. Haeck, MD, Kent
Benjamin Jeffries, MD, Wayne
Glenn Moore, MD, Genesee
James A. Read, MD, Oakland
Jack Stack, MD, Gratiot
Paul Trump, MD, Dickinson-Iron
George Wilson, Jr., MD, Marquette
Louis R. Zako, MD, Wayne

Councilor Advisors:
Robert M. Leitch, MD, Battle Creek
Robert C. Prophater, MD, Bay City
Donato F. Sarapo, MD, Adrian

WAYS & MEANS

John W. Moses, MD, Wayne, *Chairman*
T. M. Flake, MD, Wayne
Jack Hoogerhyde, MD, Kent
W. S. Jones, Jr., MD, Menominee
C. L. Oppy, MD, Roscommon
Jack R. Postle, MD, Northern Michigan
David Siegel, MD, Urology Section

Councilor Advisors:
Kenneth H. Johnson, MD, Lansing
Ernest P. Griffin, Jr., MD, Flint
John R. Ylvisaker, MD, Pontiac

PARLIAMENTARIAN

A. Stewart Kerr, Detroit

RECORD OF ATTENDANCE

1971 MSMS House of Delegates

	Meetings				
	1st	2nd	3rd	4th	5th
OFFICERS					
Speaker: Vernon V. Bass, MD	X	X	X	X	X
Vice Speaker: James D. Fryfogle, MD	X	X	X	X	X
Immed. Past President: Robert J. Mason, MD	X	—	—	—	—
Secretary: Kenneth H. Johnson, MD	X	X	X	X	X
DELEGATES:					
ALLEGAN					
James I. Clark, MD	X	X	X	X	X
ALPENA-ALCONA-PRESQUE ISLE					
F. C. O'Dell, Jr., MD	X	X	X	X	X
BARRY					
Robert J. Huebner, MD	X	X	X	X	X
BAY-ARENAC-IOSCO					
John T. Geneczko, MD	X	X	X	X	X
Paul W. Rowe, MD	X	X	X	X	X
BERRIEN					
F. Alan Kennedy, MD	X	X	X	X	X
Fredk. H. Lindenfeld	X	X	X	X	X
BRANCH					
John J. Rick, MD	X	X	X	X	—
CALHOUN					
George T. Kelleher, MD	X	X	X	X	—
Russell C. Rowan, MD	X	X	X	X	X
S. A. Yannitelli, MD	X	X	X	X	—
CASS					
Not Represented					
CHIPPEWA-MACKINAC					
Donald D. Finlayson, MD	X	X	X	X	X
CLINTON					
James M. Grost, MD	X	X	X	X	—
DELTA-SCHOOLCRAFT					
Donald N. Fitch, MD	X	X	X	X	X
DICKINSON-IRON					
Paul L. Trump, MD	X	X	X	X	—
EATON					
B. Phillip Brown, MD	X	X	X	X	X
GENESEE					
John W. MacKenzie, MD	X	X	X	X	X
Charles A. Thompson, MD	X	X	X	X	—
Lawrence G. Bateman, MD	X	X	X	X	X
Clifford W. Colwell, MD	X	X	X	X	X
Glenn E. Moore, MD	X	X	X	X	X
Lewis L. Simoni, MD	X	X	X	X	—
Richard J. McMurray, MD	X	X	X	X	X
GOGEBIC					
Not Represented					
GRAND TRAVERSE-LEELANAU-BENZIE					
Frank H. Power, MD	X	X	X	—	—
Arthur F. Dundon, MD	X	X	X	X	X
GRATIOT-ISABELLA-CLARE					
Jack M. Stack, MD	X	X	X	X	X
HILLSDALE					
Clark B. Smith, MD	X	X	X	X	X
HOUGHTON-BARAGA-KEWEENAW					
Paul G. Goodreau, MD	X	X	X	X	X
HURON					
Charles W. Oakes, Jr., MD	X	X	X	X	X
INGHAM					
Robert M. Stow, MD	X	X	X	X	X
D. Bonta Hiscoe, MD	X	X	X	X	X
David Kahn, MD	X	X	X	X	X
Herbert W. Harris, MD	X	X	X	X	X
Harry C. George, MD	X	X	X	—	—
Joseph R. Cipparone, MD	—	—	—	X	X
George D. Stilwill, MD	X	X	X	X	X
Harold E. Crow, MD	X	X	X	X	X
IONIA-MONTCALM					
Robert E. Rice, MD	X	X	X	X	X
JACKSON					
Richard C. Deming, MD	X	X	X	X	X
Edward R. Weddon, MD	X	X	X	X	X
KALAMAZOO					
Donald G. May, MD	X	X	X	X	X
Adrian J. Neerken, MD	X	X	—	—	—
Thomas E. Andrews, MD	X	X	X	X	X
Robert C. Kettunen, MD	X	X	X	—	—
Thomas R. Berglund, MD	X	X	X	X	—
KENT					
Frederick S. Gillett, MD	X	X	X	X	X
William Haeck, MD	X	X	X	X	X
Richard A. Rasmussen, MD	X	X	X	X	X
Harvey M. Andre, MD	X	X	X	X	X
Jack Hoogerhyde, MD	X	X	X	X	X
Jack G. Lukens, MD	X	X	X	X	—
Kornelius Van Goor, MD	X	X	X	X	X
Gordon L. Bartek, MD	X	—	—	—	X
William E. Kincaid, MD	—	—	—	X	X
Robert D. Burton, MD	X	X	X	X	—
Joseph R. Lentini, MD	—	—	—	—	X
LAPEER					
Charles E. Conaway, MD	X	X	X	X	X
LENAWEE					
Marvin B. Wolf, MD	X	X	X	X	—
LIVINGSTON					
Edwin S. Woodworth, MD	X	X	—	—	—
LUCE					
Bernard G. Keizer, MD	—	—	X	X	—
MACOMB					
Gerald W. Morris, MD	X	X	X	X	X
Earl A. Rinkenberger, MD	X	X	X	X	X
Thomas J. Setter, MD	X	X	X	X	X
Orville W. Oughtred, MD	X	X	X	X	X
MANISTEE					
David A. Wild, MD	—	—	—	X	X
MARQUETTE-ALGER					
George M. Wilson, Jr., MD	X	X	X	X	X
MASON					
William F. Sutter, MD	X	X	X	X	X
MECOSTA-OSCEOLA-LAKE					
James L. Tyson, MD	X	X	X	X	X
MENOMINEE					
William S. Jones, Jr., MD	X	X	X	X	X
MIDLAND					
V. A. Marks, MD	X	X	X	X	X
MONROE					
Warren J. Liedcl, MD	X	X	X	X	X
MUSKEGON					
H. Clay Tellman, MD	X	X	X	X	X
Howard V. Sanden, MD	X	X	X	X	X
Leland E. Holly, II, MD	X	X	X	X	X
NEWAYGO					
Robert E. Paxton, MD	X	X	X	X	X

	Meetings				
	1st	2nd	3rd	4th	5th
NORTH CENTRAL					
Charles L. Oppy, MD	X	X	X	X	X
NORTHERN MICHIGAN					
Jack R. Postle, MD	X	X	X	X	X
OAKLAND					
Zachary F. Endress, MD	X	X	X	X	X
John H. McLaughlin, MD	X	X	X	X	X
Worth W. Henderson, MD	X	X	X	X	X
Edward E. Elder, Jr., MD	X	X	X	X	X
Paul T. Lahti, MD	X	X	X	X	X
Arnold L. Brown, MD	X	X	X	X	X
Bruce D. Bauer, MD	X	X	X	X	X
James A. Read, MD	X	X	X	X	X
Kenneth L. Urwiller, MD	X	X	X	X	X
John B. Bryan, MD	X	X	X	X	X
Keith M. Holmes, MD	X	X	X	X	X
Richard R. Galpin, MD	X	X	X	X	X
Edwin J. Westfall, MD	X	X	X	X	X
Abner I. Ragins, MD	—	—	—	X	X
OCEANA					
John J. Vrbanac, MD	X	X	X	X	X
ONTONAGON					
Not Represented					
OTTAWA					
Alvin Bonzelaar, MD	X	X	X	X	X
Melvin J. Frieswyk, MD	X	X	X	X	X
SAGINAW					
Robert J. Toteff, MD	X	X	X	X	X
Jack L. Barry, MD	—	X	X	X	X
William A. DeYoung, MD	X	X	X	X	X
Robert E. Jardinico, MD	X	X	X	X	X
ST. CLAIR					
Daniel J. Wilhelm, MD	X	X	X	X	X
Charles N. Hoyt, MD	X	X	X	—	—
ST. JOSEPH					
Robert H. Evans, MD	X	X	X	X	X
SANILAC					
Keate T. McGunegle, MD	X	X	X	X	X
SHIAWASSEE					
Henry T. Forsyth, MD	X	X	X	X	X
TUSCOLA					
Herbert L. Nigg, MD	X	X	X	X	X
VAN BUREN					
David J. Millard, MD	X	X	X	X	X
WASHTENAW					
Henry A. Scovill, MD	X	X	X	X	X
Clarence E. Crook, MD	X	X	X	X	X
Harold F. Falls, MD	X	X	X	X	X
Harry A. Towsley, MD	X	X	X	—	—
George H. Koepke, MD	—	—	—	X	X
Neal A. Vanselow, MD	X	X	X	—	—
Richard D. Watkins, MD	—	—	—	X	X
Howard R. Williams, MD	X	X	X	X	X
Stuart M. Gould, Jr., MD	X	X	X	X	—
Francis L. Purcell, MD	—	—	—	—	X
John W. Henderson, MD	X	X	X	X	X
Beverly C. Payne, MD	X	X	X	X	—
WAYNE					
Sidney Adler, MD	X	—	—	—	—
Robert D. Allaben, MD	X	X	X	X	X
Richard D. Anslow, MD	X	X	—	X	X
Raymond J. Barrett, MD	X	X	X	X	—
Frank B. Bicknell, MD	X	X	X	X	X
Alexander Blain, III, MD	X	X	X	—	—
James B. Blodgett, MD	X	X	X	X	X
Brock E. Brush, MD	X	X	X	X	X
Donald I. Bryan, MD	—	X	X	X	X
Ned I. Chalat, MD	X	X	X	X	—
Sidney E. Chapin, MD	X	X	X	X	X
Paul J. Connolly, MD	—	X	X	X	X
Ralph R. Cooper, MD	X	X	—	X	X
John F. Cotant, MD	X	—	—	—	X
James C. Danforth, MD	X	X	X	X	X
Charles E. Darling, MD	X	X	X	X	X
Henry M. Domzalski, MD	X	X	X	X	X
Thomas M. Flake, MD	X	—	—	X	X
C. Jackson France, MD	X	X	X	—	—
Eugene L. Freitas, MD	X	X	X	X	X
Louis F. Hayes, MD	X	X	X	X	X
Robert H. Hamburg, MD	X	X	X	X	—
Louis E. Heideman, MD	X	X	X	X	X
Jean H. Holdredge, MD	X	X	X	X	X
Thomas Ganos, MD	X	X	X	X	X
Eli J. Igna, MD	X	X	—	X	X

	Meetings				
	1st	2nd	3rd	4th	5th
Benjamin Jeffries, MD	X	X	X	—	—
James M. Kennary, Jr., MD	X	X	X	X	X
Conrad R. Lam, MD	X	X	X	X	—
Arthur B. Levant, MD	X	X	X	X	X
Gerald H. Mandell, MD	X	X	X	X	X
Marjorie P. Meyers, MD	X	X	X	X	X
John W. Moses, MD	X	X	X	X	X
Ralph H. Pino, MD	X	X	X	X	X
Francis P. Rhoades, MD	X	X	X	X	X
Kenneth J. Ray, MD	X	X	X	X	X
Homer M. Smathers, MD	X	X	X	X	X
Donald N. Sweeny, Jr., MD	X	X	X	X	—
Lee B. Stevenson, MD	X	X	X	X	X
Edward J. Tallant, MD	X	X	X	X	X
Arthur A. Ulmer, MD	X	X	X	X	—
Frank B. Walker, II, MD	X	X	X	X	X
Robert K. Whitely, MD	X	X	—	—	—
Irwin A. Wilner, MD	X	X	X	X	—
Joseph A. Witter, MD	X	X	X	X	X
William J. Yott, MD	X	X	X	X	X
Louis R. Zako, MD	X	X	X	X	X
WEXFORD-MISSAUKEE					
Dennis E. VanAlst, MD	X	X	X	X	X
MEDICAL SCHOOLS:					
MICHIGAN STATE UNIVERSITY					
Michael R. Shier	X	X	X	X	X
WAYNE STATE UNIVERSITY					
Paul Mitchell	X	X	—	—	—
UNIVERSITY OF MICHIGAN					
Stephen Lowry	X	X	X	—	—
SECTION DELEGATES:					
ALLERGY AND APPLIED IMMUNOLOGY					
James A. McLean, MD	X	X	X	X	X
ANESTHESIOLOGY					
Not Represented					
DERMATOLOGY					
Not Represented					
GASTROENTEROLOGY					
Not Represented					
GENERAL PRACTICE					
James F. Dooley, MD	X	X	X	X	—
INTERNAL MEDICINE					
William B. McIntyre, MD	X	X	X	X	—
NEUROLOGY					
Mark C. Levine, MD	—	—	X	X	X
NEUROLOGICAL SURGERY					
Not Represented					
OBSTETRICS-GYNECOLOGY					
Harrison C. Visscher, MD	X	X	X	—	—
OCCUPATIONAL MEDICINE					
Not Represented					
OPHTHALMOLOGY					
Not Represented					
ORTHOPEDIC SURGERY					
Hira E. Branch, MD	X	X	X	X	X
OTOLARYNGOLOGY					
John W. Grigg, MD	X	X	X	X	X
PATHOLOGY					
Leo W. Walker, MD	X	X	—	—	—
PEDIATRICS					
Not Represented					
PHYSICAL MEDICINE					
Jack R. Grommons, MD	X	X	—	X	X
PLASTIC SURGERY					
Not Represented					
PROCTOLOGY					
W. Patrick Mazier, MD	X	—	—	—	—
PSYCHIATRY					
Stephen C. Mason, III, MD	X	X	X	X	X
PUBLIC HEALTH & PREVENTIVE MEDICINE					
Winston B. Prothro, MD	X	X	X	X	X
RADIOLOGY					
Leland E. Holly, II, MD	X	X	X	X	X
SURGERY					
Michael N. Zelenock, MD	X	X	X	X	X
THORACIC SURGERY					
Not Represented					
UROLOGY					
David Siegel, MD	X	X	X	X	X

THE LIBRARY
UNIVERSITY OF CALIFORNIA
San Francisco
THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

7 DAY LOAN

7 DAY
NOV 22 1972
RETURNED
NOV 22 1972
7 DAY
APR 15 1974
RETURNED
APR - 8 1974

15m-7,'72(Q3551s4)4315—A33-9

St

269911